



Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
 - English
 - Alternative Language (Spanish)
 2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
 - English
 - Alternative Language (Spanish)
 3. Application materials
-



Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
 - Inglés
 - Idioma alternativo (español)
2. Primer aviso (NORI, por sus siglas en inglés)
 - Inglés
 - Idioma alternativo (español)
3. Solicitud original

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Undine Texas Environmental, LLC (CN604519330) proposes to operate Marigold Wastewater Treatment Facility (RN112012273), a activated sludge process plant operated in the complete mix mode. The facility will be located at The facility will be located approx. 0.8 miles sw of the intersection of Mathis Rd and Betka Rd Road 902, in, Waller County, Texas 77484. This application for a new discharge with a final phase of 0.125MGD..

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), ammonia nitrogen (NH₃-N), and *Escherichia coli*.. Domestic wastewater will be treated by an activated sludge process plant and the treatment units will include a bar screen, aeration basins, final clarifiers, sludge digesters, and chlorine contact chambers.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Undine Texas Environmental, LLC (CN604519330) (RN112012273), planta de procesamiento de lodos activados operada en el modo de mezcla completa. La instalación estará ubicada aproximadamente a 0.8 millas al suroeste de la intersección de Mathis Rd y Betka Rd propone operar Planta de tratamiento de aguas residuales de Marigold un será Road 902, en, County, Texas. Esta solicitud de un nuevo vertido con una fase final de 0,125MGD. Waller 77484

Se espera que las descargas de la instalación contengan una demanda bioquímica carbonosa de oxígeno (CBOD5) de cinco días, sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH3-N) y *Escherichia coli*. Las aguas residuales domésticas serán tratadas por una planta de procesamiento de lodos activados y las unidades de tratamiento incluirán una pantalla de barras, cuencas de aireación, clarificadores finales, digestores de lodos y cámaras de contacto con cloro.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT

PROPOSED PERMIT NO. WQ0016580001

APPLICATION. Undine Texas Environmental, LLC, 17681 Telge Road, Cypress, Texas 77429, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016580001 (EPA I.D. No. TX0146366) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 125,000 gallons per day. The domestic wastewater treatment facility will be located approximately 0.8 miles southwest of the intersection of Betka Road and Mathis Road, near the city of Waller, in Waller County, Texas 77484. The discharge route will be from the plant site to Mound Creek, thence to Cypress Creek. TCEQ received this application on July 19, 2024. The permit application will be available for viewing and copying at Melanee Smith Memorial Library, 1018 Saunders Street, Waller, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.915,30.006111&level=18>

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

El aviso de idioma alternativo en español está disponible en

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. **Notice of the Application and Preliminary Decision will be published and mailed to those who are on the county-wide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.**

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public

interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application.** If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing. A contested case hearing is a legal proceeding similar to a civil trial in state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period and, the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at <https://www14.tceq.texas.gov/epic/eComment/>, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Undine Texas Environmental, LLC at the address stated above or by calling Mr. Jeff Goebel, Business Development, at 713-724-9321.

Issuance Date: October 15, 2024

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECIBO DE LA SOLICITUD Y EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA

PERMISO PROPUESTO NO. WQ0016580001

APLICACIÓN. Undine Texas Environmental, LLC, 17681 Telge Road, Cypress, Texas 77429, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) el Permiso No. WQ0016580001 (EPA I.D. No. TX0146366) autorizar la descarga de aguas residuales tratadas a un volumen que no exceda un flujo promedio diario de 125,000 galones por día. La instalación de tratamiento de aguas residuales domésticas estará ubicada aproximadamente a 0.8 millas al suroeste de la intersección de Betka Road y Mathis Road, cerca de la ciudad de Waller, en el condado de Waller, Texas 77484. La ruta de descarga será desde el sitio de la planta hasta Mound Creek, y de allí a Cypress Creek. TCEQ recibió esta solicitud el 19 de julio de 2024. La solicitud de permiso estará disponible para su visualización y copia en la Biblioteca Conmemorativa Melanee Smith, 1018 Saunders Street, Waller, Texas antes de la fecha en que se publique este aviso en el periódico. La solicitud, incluidas las actualizaciones, y los avisos asociados están disponibles electrónicamente en la siguiente página web:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. Este enlace a un mapa electrónico de la ubicación general del sitio o instalación se proporciona como una cortesía pública y no forma parte de la solicitud o aviso. Para conocer la ubicación exacta, consulte la aplicación.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.915,30.006111&level=18>

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar **comentarios públicos o pedir una reunión pública sobre esta solicitud.** El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos

los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía

<http://www14.tceq.texas.gov/epic/eComment/> o por escrito dirigidos a la **Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087**. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del undine Texas Environmental, LLC a la dirección indicada arriba o llamando a Jeff Goebel al 713-724-9321.

Fecha de emisión 15 de octubre de 2024

Abesha Michael

From: Jeff Goebel <jgoebel@undinellc.com>
Sent: Wednesday, September 18, 2024 9:36 PM
To: Abesha Michael
Subject: RE: Application for Proposed Permit No. WQ0016580001 - Notice of Deficiency Letter
Attachments: A-2 PLS.docx; Mailing Labels.docx; Page 8.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Abesha,

1. Section II, items 11, 12, 13 on page 1 of the Core Data Form (CDF): These items were left blank. However, all items in the CDF must be completed. Please submit an updated page 1.

Please see attached revised page one of the Core Data Form.

2. Section III, item 25, physical location description, on page 2 of the Core Data Form (CDF): We have revised the distance between the facility location and the road intersection. Facility is located approximately 1.15 miles southwest of the intersection of Betka Road and Mathis Road, near the city of Waller, in Waller County, Texas 77484: Please confirm.

The location of the facility at 0.8 miles from the intersection is correct.

3. Section 8, item F on page 7 of the administrative report: Thank you for the Plain Language Summary in English and Spanish (PLS). However, the summaries are not completed. Please complete the PLS including Customer Number (CN) and Regulated Entity Number (RN). Please refer the CN and RN numbers from the subject line of this letter.

Please see revised PLS.

4. Section 10, item C on page 8 of the administrative report: This item was left blank. However, confirmation to discharge to a city, county or state highway right-of-way has to be determined. Please update and submit a revised page.

Please see revised page 8.

5. Section 13 on page 10 of the administrative report: We are unable to locate the FULL-SIZE USGS map, However, for proposed application a full-size USGS map is a requirement. Please submit labeled full size 15 minutes USGS map.

A full size USGS was submitted with the application, the copy you were most likely given was not the original. An new original USGS map will be overnight to your attention on 9/19/24.

6. Section 14, Signature Page, on Page 13 of the Administrative Report: Mr. Vance Tillman, as an authorized agent, signed the signature page we received. Texas Commission of Environmental Quality (TCEQ) rules require the application be signed by a principal executive officer (e.g., Vice President, Board of Directors, etc.). We were unable to confirm whether Mr. Tillman is authorized to sign. Please confirm Mr. Tillman meets the signatory requirements under 30 TAC 305.44 and is authorized to sign the application. If not, please submit a notarized signature page signed by an authorized agent and update section 3, item A on page 3 of the administrative report accordingly.

Mr. Tillman is the CFO of Undine and Authorized to sign.

7. Section 1, item C, affected landowner information, on page 12 of the administrative report: Please email the mailing labels in a word format.

Please see attached mailing labels.

8. Section 1, item D, affected landowner information on page 12 of the application: Thank you for addressing this item. However, CAD doesn't indicate the source of the landowner's name and mailing address information. Please submit a revised page 12 with the name of the source.

The source of the landowner mailing labels, and information was derived from the County Appraisal District (CAD). This has been an acronym used on many applications.

9. The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

APPLICATION. Undine Texas Environmental, LLC, 17681 Telge Road, Cypress, Texas 77429, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016580001 (EPA I.D. No. TX0146366) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of

125,000 gallons per day. The domestic wastewater treatment facility will be located approximately 1.15 miles southwest of the intersection of Betka Road and Mathis Road, near the city of Waller, in Waller County, Texas 77484 (TBD-1.15 mi). The discharge route will be from the

plant site directly to Mound Creek (Pending-RWA confirmation). TCEQ received this application on July 19, 2024.

The permit application will be available for viewing and copying at Melanee Smith Memorial Library', 1018 Saunders Street, Waller, Texas prior to the date this notice is published in the newspaper. The application,

including any updates, and associated notices are available electronically at the following webpage:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.915,30.006111&level=18>

Further information may also be obtained from Undine Texas Environmental, LLC at the address stated above or by calling Mr. Jeff Goebel, Business Development, at 713-724-9321.

The NORI is correct pending the missing and revised information from TCEQ.

10. The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

Once the above NORI is completed by the TCEQ please forward me a word copy of the notice and I will have it translated into Spanish. Until then a translation will not be complete.

Please let me know if you need additional information.

Thank you

Jeff Goebel

E. Owner of effluent disposal site:

Prefix: [Click to enter text.](#)

Last Name, First Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: [Click to enter text.](#)

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant):

Prefix: [Click to enter text.](#)

Last Name, First Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: [Click to enter text.](#)

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

☐

Yes

☐

No

If **no**, or a new permit application, please give an accurate description:

The facility will be located approx. 0.8 miles sw of the intersection of Mathis Rd and Betka Rd

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☐

Yes

☐

No

If **no**, or a new or amendment permit application, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

From the facility thence to Mound Creek

City nearest the outfall(s): Waller

County in which the outfalls(s) is/are located: Waller

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☐

Yes

☒

No



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by [Title 30, Texas Administrative Code \(30 TAC\), Chapter 39, Subchapter H](#). Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

If you are subject to the alternative language notice requirements in [30 TAC Section 39.426](#), **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Undine Texaws Environmental, LLC (CN604519330) proposes to operate Marigold Wastewater Treatment Facility (RN112012273), a activated sludge process plant operated in the complete mix mode. The facility will be located at The facility will be located approx. 0.8 miles sw of the intersection of Mathis Rd and Betka Rd Road 902, near the city of Waller, Waller County, Texas 77484. This application for a new discharge with a final phase of 0.125MGD. <<For TLAP applications include the following sentence, otherwise delete:>> This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain contain five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), ammonia nitrogen (NH₃-N), and *Escherichia coli*. Domestic wastewater will be treated by an activated sludge process plant and the treatment units will include a bar screen, aeration basins, final clarifiers, sludge digesters, and chlorine contact chambers and De chlorine contact chambers. .

SUKHANI MANAGEMENT LLC
16521 MATHIS ROAD
WALLER TX 77484

BRILEY KRISTINA
BRILEY BILLY C & KATHY & ALISHA K
PO BOX 698
WALLER TX 77484

WILSON DAMON KENNETH
15983 MATHIS ROAD
WALLER TX 77484

LEWIS MARNA KAY SHOFNAR
PO BOX 1618
WALLER TX 77484

MERIT NDT LLC
1511 LAKE GRAYSON DR
KATY TX 77494

HORACE DELTON LAMONTE
PO BOX 1557
WALLER TX 77484

SCHWARTZ JUDITH L
3331 DAMICO ST #903
HOUSTON TX 77019

REESE SANDRA RUTH
7757 HIDDEN TRAIL
BRYAN TX 77808

HEGAR A B TRUST
FOR GLENN A HEGAR
PO BOX 27
HOCKLEY TX 77447



TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input type="checkbox"/> Other
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 604519330		RN 112012273

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)			
<input type="checkbox"/> New Customer <input checked="" type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership					
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>	
Undine Texas Environmental, LLC					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
801768069		32050717274		46316881	
11. Type of Customer:		<input type="checkbox"/> Corporation		<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship		<input checked="" type="checkbox"/> Other: LLC	
12. Number of Employees				13. Independently Owned and Operated?	
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator <input checked="" type="checkbox"/> Other:					
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant					
15. Mailing Address:					
17681 Telge Rd					
City		Cypress	State	TX	ZIP
					77429
ZIP + 4					
16. Country Mailing Information (if outside USA)			17. E-Mail Address (if applicable)		
			cthomas@undinellc.com		
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	

APPLICATION FOR RENEWAL OF A DOMESTIC WASTEWATER DISCHARGE PERMIT

Permit No.: Pending

Marigold Wastewater Treatment Facility

Submitted to:

**Executive Director
Texas Commission on Environmental Quality
Attn: Water Quality Division
Wastewater Permits Section/Application Team (MC 148)
12100 Park 35 Circle
Building F
Austin Texas 78753**



Submitted by:

**Undine Texas Environmental, LLC
17681 Telge Rd
Cypress Texas 77429**

0016580001



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

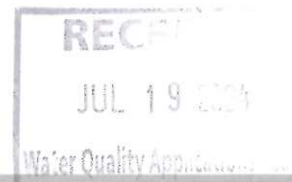
Complete and submit this checklist with the application.

APPLICANT NAME: Undine Texas Environmental, LLC

PERMIT NUMBER (If new, leave blank): WQ00 [Click to enter text.](#)

Indicate if each of the following items is included in your application.

	Y	N		Y	N
Administrative Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Original USGS Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Administrative Report 1.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Affected Landowners Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SPIF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Landowner Disk or Labels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Core Data Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Buffer Zone Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Public Involvement Plan Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Flow Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Site Drawing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Original Photographs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Design Calculations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Solids Management Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water Balance	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 3.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 3.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 4.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 6.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 7.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			



For TCEQ Use Only

Segment Number _____ County _____
Expiration Date _____ Region _____
Permit Number _____



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**DOMESTIC WASTEWATER PERMIT APPLICATION
ADMINISTRATIVE REPORT 1.0**

For any questions about this form, please contact the Applications Review and Processing Team at 512-239-4671.

Section 1. Application Fees (Instructions Page 26)

Indicate the amount submitted for the application fee (check only one).

Flow	New/Major Amendment	Renewal
<0.05 MGD	\$350.00 <input type="checkbox"/>	\$315.00 <input checked="" type="checkbox"/>
≥0.05 but <0.10 MGD	\$550.00 <input type="checkbox"/>	\$515.00 <input type="checkbox"/>
≥0.10 but <0.25 MGD	\$850.00 <input checked="" type="checkbox"/>	\$815.00 <input type="checkbox"/>
≥0.25 but <0.50 MGD	\$1,250.00 <input type="checkbox"/>	\$1,215.00 <input type="checkbox"/>
≥0.50 but <1.0 MGD	\$1,650.00 <input type="checkbox"/>	\$1,615.00 <input type="checkbox"/>
≥1.0 MGD	\$2,050.00 <input type="checkbox"/>	\$2,015.00 <input type="checkbox"/>

Minor Amendment (for any flow) \$150.00 ☐

Payment Information:

Mailed Check/Money Order Number: 9200
Check/Money Order Amount: 850.00
Name Printed on Check: Undine Operating, LLC

EPAY Voucher Number: Click to enter text.

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

a. Check the box next to the appropriate authorization type.

- ☐ Publicly-Owned Domestic Wastewater
☒ Privately-Owned Domestic Wastewater
☐ Conventional Wastewater Treatment

b. Check the box next to the appropriate facility status.

- ☒ Active ☐ Inactive

c. Check the box next to the appropriate permit type.

- ☒ TPDES Permit
- ☐ TLAP
- ☐ TPDES Permit with TLAP component
- ☐ Subsurface Area Drip Dispersal System (SADDs)

d. Check the box next to the appropriate application type

- ☒ New
- ☐ Major Amendment with Renewal
- ☐ Major Amendment without Renewal
- ☐ Renewal without changes
- ☐ Minor Amendment with Renewal
- ☐ Minor Amendment without Renewal
- ☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: Click to enter text.

f. For existing permits:

Permit Number: WQ00 Click to enter text.

EPA I.D. (TPDES only): TX

Expiration Date: Click to enter text.

Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 26)

A. The owner of the facility must apply for the permit.

What is the Legal Name of the entity (applicant) applying for this permit?

Undine Texas Environmental, LLC

(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal documents forming the entity.)

If the applicant is currently a customer with the TCEQ, what is the Customer Number (CN)?
You may search for your CN on the TCEQ website at <http://www15.tceq.texas.gov/crpub/>

CN: 604519330

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in 30 TAC § 305.44.

Prefix: Mr

Last Name, First Name: Tillman, Vance

Title: CFO

Credential: Click to enter text.

B. **Co-applicant information.** Complete this section only if another person or entity is required to apply as a co-permittee.

What is the Legal Name of the co-applicant applying for this permit?

Click to enter text.

(The legal name must be spelled exactly as filed with the TX SOS, with the County, or in the legal documents forming the entity.)

If the co-applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at: <http://www15.tceq.texas.gov/crpub/>

CN: Click to enter text.

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in 30 TAC § 305.44.

Prefix: Click to enter text.

Last Name, First Name: Click to enter text.

Title: Click to enter text.

Credential: Click to enter text.

Provide a brief description of the need for a co-permittee: Click to enter text.

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0. [A-1](#)

Section 4. Application Contact Information (Instructions Page 27)

This is the person(s) TCEQ will contact if additional information is needed about this application. Provide a contact for administrative questions and technical questions.

A. Prefix: Mr.

Last Name, First Name: Jeff Goebel

Title: Business Development

Credential: Click to enter text.

Organization Name: Undine Texas Environmental, LLC

Mailing Address: 17681 Telge Rd

City, State, Zip Code: Cypress Texas 77429

Phone No.: 713-724-9321

E-mail Address: jgoebel@undinellc.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Click to enter text.

Last Name, First Name: Click to enter text.

Title: Click to enter text.

Credential: Click to enter text.

Organization Name: Click to enter text.

Mailing Address: Click to enter text.

City, State, Zip Code: Click to enter text.

Phone No.: Click to enter text.

E-mail Address: Click to enter text.

Check one or both: ☐ Administrative Contact ☐ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

Provide the names and contact information for two individuals that can be contacted throughout the permit term.

A. Prefix: Ms

Last Name, First Name: Carey Thomas

Title: VP

Credential: Click to enter text.

Organization Name: Undine Texas Environmental, LLC

Mailing Address: 17681 Telge Rd

City, State, Zip Code: Cypress Texas 77429

Phone No.: 713-554-7820

E-mail Address: cthomas@undinellc.com

B. Prefix: Mr. Last Name, First Name: Andy Thomas
Title: VP Credential: Click to enter text.
Organization Name: Undine Texas Environmental, LLC
Mailing Address: 17681 Telge Rd City, State, Zip Code: Cypress Texas 77429
Phone No.: 713-554-7820 E-mail Address: athomas@undinellc.com

Section 6. Billing Contact Information (Instructions Page 27)

The permittee is responsible for paying the annual fee. The annual fee will be assessed to permits ***in effect on September 1 of each year.*** The TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed (using form TCEQ-20029).

Prefix: Ms Last Name, First Name: Carey Thomas
Title: VP Credential: Click to enter text.
Organization Name: Undine Texas Environmental, LLC
Mailing Address: 17681 Telge Rd City, State, Zip Code: Cypress Texas 77429
Phone No.: 713-554-7820 E-mail Address: cthomas@undinellc.com

Section 7. DMR/MER Contact Information (Instructions Page 27)

Provide the name and complete mailing address of the person delegated to receive and submit Discharge Monitoring Reports (DMR) (EPA 3320-1) or maintain Monthly Effluent Reports (MER).

Prefix: Ms Last Name, First Name: Carey Thomas
Title: VP Credential: Click to enter text.
Organization Name: Undine Texas Environmental, LLC
Mailing Address: 17681 Telge Rd City, State, Zip Code: Cypress Texas 77429
Phone No.: 713-554-7820 E-mail Address: cthomas@undinellc.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Jeff Goebel
Title: Business Development Credential: Click to enter text.
Organization Name: Undine Texas Environmental, LLC
Mailing Address: 17681 Telge Rd City, State, Zip Code: Cypress Texas 77429
Phone No.: 713-724-9321 E-mail Address: jgoebel@undinellc.com

B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package

Indicate by a check mark the preferred method for receiving the first notice and instructions:

- ☒ E-mail Address
☐ Fax
☐ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Mr.

Last Name, First Name: Jeff Goebel

Title: Business Development

Credential: Click to enter text.

Organization Name: Undine Texas Environmental, LLC

Mailing Address: 17681 Telge Rd

City, State, Zip Code: Cypress Texas 77429

Phone No.: 713-724-9321

E-mail Address: jgoebel@undinellc.com

D. Public Viewing Information

If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.

Public building name: Melanee Smith Memorial Library`

Location within the building: Click to enter text.

Physical Address of Building: 1018 Saunders St

City: Waller

County: Waller

Contact (Last Name, First Name): Click to enter text.

Phone No.: 936-372-3961 Ext.: Click to enter text.

E. Bilingual Notice Requirements

This information is **required** for **new, major amendment, minor amendment or minor modification, and renewal** applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

☒ Yes ☐ No

If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

☒ Yes ☐ No

3. Do the students at these schools attend a bilingual education program at another location?
- ☐ Yes ☒ No
4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?
- ☐ Yes ☒ No
5. If the answer is **yes to question 1, 2, 3, or 4**, public notices in an alternative language are required. Which language is required by the bilingual program? Spanish

F. Plain Language Summary Template

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment.

Attachment: A-2

G. Public Involvement Plan Form

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a **new permit or major amendment to a permit** and include as an attachment.

Attachment: A-3

Section 9. Regulated Entity and Permitted Site Information (Instructions Page 29)

- A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN Click to enter text.

Search the TCEQ's Central Registry at <http://www15.tceq.texas.gov/crpub/> to determine if the site is currently regulated by TCEQ.

- B. Name of project or site (the name known by the community where located):

Marigold Wastewater Treatment Facility

- C. Owner of treatment facility: Undine Texas Environmental, LLC

Ownership of Facility: ☐ Public ☒ Private ☐ Both ☐ Federal

- D. Owner of land where treatment facility is or will be:

Prefix: Click to enter text.

Last Name, First Name: Undine Texas Environmental, LLC

Title: Click to enter text.

Credential: Click to enter text.

Organization Name: Undine Texas Environmental, LLC

Mailing Address: 17681 Telge Rd

City, State, Zip Code: Cypress Texas 77429

Phone No.: 713-554-7820

E-mail Address: cthomas@undinellc.com

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: Click to enter text.

E. Owner of effluent disposal site:

Prefix: [Click to enter text.](#)

Last Name, First Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: [Click to enter text.](#)

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant):

Prefix: [Click to enter text.](#)

Last Name, First Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Credential: [Click to enter text.](#)

Organization Name: [Click to enter text.](#)

Mailing Address: [Click to enter text.](#)

City, State, Zip Code: [Click to enter text.](#)

Phone No.: [Click to enter text.](#)

E-mail Address: [Click to enter text.](#)

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: [Click to enter text.](#)

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

☐ Yes ☐ No

If **no**, or a new permit application, please give an accurate description:

The facility will be located approx. 0.8 miles sw of the intersection of Mathis Rd and Betka Rd

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☐ Yes ☐ No

If **no**, or a new or amendment permit application, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

From the facility thence to Mound Creek

City nearest the outfall(s): Waller

County in which the outfalls(s) is/are located: Waller

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☐ Yes ☐ No

If **yes**, indicate by a check mark if:

- ☐ Authorization granted ☐ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: [Click to enter text.](#)

- D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: NA

Section 11. TLAP Disposal Information (Instructions Page 32)

- A. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

☐ Yes ☒ No

If **no**, or a **new or amendment permit application**, provide an accurate description of the disposal site location:

[Click to enter text.](#)

- B. City nearest the disposal site: [Click to enter text.](#)

- C. County in which the disposal site is located: [Click to enter text.](#)

- D. For TLAPs, describe the routing of effluent from the treatment facility to the disposal site:

[Click to enter text.](#)

- E. For TLAPs, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: [Click to enter text.](#)

Section 12. Miscellaneous Information (Instructions Page 32)

- A. Is the facility located on or does the treated effluent cross American Indian Land?

☐ Yes ☒ No

- B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

[Click to enter text.](#)

C. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

☐ Yes ☒ No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: [Click to enter text.](#)

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account number: [Click to enter text.](#)

Amount past due: [Click to enter text.](#)

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide the following information:

Enforcement order number: [Click to enter text.](#)

Amount past due: [Click to enter text.](#)

Section 13. Attachments (Instructions Page 33)

Indicate which attachments are included with the Administrative Report. Check all that apply:

☐ Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.

☒ Original full-size USGS Topographic Map with the following information:

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.

☐ Attachment 1 for Individuals as co-applicants

☐ Other Attachments. Please specify: [Click to enter text.](#)

Section 14. Signature Page (Instructions Page 34)

If co-applicants are necessary, each entity must submit an original, separate signature page.

Permit Number: [Click to enter text.](#)

Applicant: Undine Texas Environmental, LLC

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

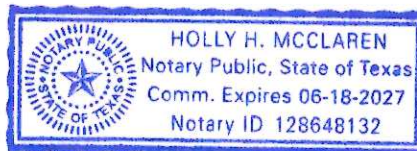
Signatory name (typed or printed): Vance Tillman

Signatory title: Chief Financial Officer

Signature:  Date: 07/17/24
(Use blue ink)

Subscribed and Sworn to before me by the said Vance Tillman
on this 17th day of July, 20 24.
My commission expires on the 18th day of June, 20 27.


Notary Public



[SEAL]


County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

- A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:
- ☒ The applicant's property boundaries
 - ☒ The facility site boundaries within the applicant's property boundaries
 - ☒ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
 - ☐ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
 - ☒ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
 - ☒ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
 - ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
 - ☐ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
 - ☐ The property boundaries of all landowners surrounding the effluent disposal site
 - ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
 - ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
- B. ☒ Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.
- C. Indicate by a check mark in which format the landowners list is submitted:
- ☒ USB Drive
 - ☐ Four sets of labels
- D. Provide the source of the landowners' names and mailing addresses: CAD
- E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?
- ☐ Yes
 - ☒ No

If **yes**, provide the location and foreseeable impacts and effects this application has on the land(s):

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided.

- ☒ At least one original photograph of the new or expanded treatment unit location
- ☒ At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- ☐ At least one photograph of the existing/proposed effluent disposal site
- ☒ A plot plan or map showing the location and direction of each photograph

Section 3. Buffer Zone Map (Instructions Page 38)

A. Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.

- The applicant's property boundary;
- The required buffer zone; and
- Each treatment unit; and
- The distance from each treatment unit to the property boundaries.

B. Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.

- ☒ Ownership
- ☐ Restrictive easement
- ☐ Nuisance odor control
- ☐ Variance

C. Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?

- ☒ Yes
- ☐ No

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form applies to TPDES permit applications only. Complete and attach the Supplemental Permit information Form (SPIF) (TCEQ Form 20971).

Attachment: A-8

111132299617517106649

Attachment A-1



TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input type="checkbox"/> Other
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry.**	3. Regulated Entity Reference Number (if issued)
CN 604519330		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
<input type="checkbox"/> New Customer <input checked="" type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership			
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		<i>If new Customer, enter previous Customer below:</i>	
Undine Texas Environmental, LLC			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
801768069	32050717274	46316881	
11. Type of Customer:	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:	
12. Number of Employees		13. Independently Owned and Operated?	
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator <input checked="" type="checkbox"/> Other: <input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant			
15. Mailing Address:	17681 Telge Rd		
	City	Cypress	State TX ZIP 77429 ZIP + 4
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
		cthomas@undinellc.com	
18. Telephone Number		19. Extension or Code	20. Fax Number (if applicable)

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If "New Regulated Entity" is selected, a new permit application is also required.)

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)

Marigold Wastewater Treatment Facility

23. Street Address of the Regulated Entity:

(No PO Boxes)

City

State

ZIP

ZIP + 4

24. County

Waller

If no Street Address is provided, fields 25-28 are required.

25. Description to

Physical Location:

The facility will be located approx. 0.8 miles sw of the intersection of Mathis Rd and Betka Rd

26. Nearest City

State

Nearest ZIP Code

Waller

TX

77484

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:

30° 0'43.22"N

28. Longitude (W) In Decimal:

95°54'54.88"W

Degrees

Minutes

Seconds

Degrees

Minutes

Seconds

29. Primary SIC Code

30. Secondary SIC Code

31. Primary NAICS Code

32. Secondary NAICS Code

(4 digits)

(4 digits)

(5 or 6 digits)

(5 or 6 digits)

4952

33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)

Water and Wastewater Utilities

34. Mailing

17681 Telge Rd

Address:

City

Cypress

State

TX

ZIP

77429

ZIP + 4

35. E-Mail Address:

cthomas@undinellc.com

36. Telephone Number

37. Extension or Code

38. Fax Number (if applicable)

(713) 574-5953

() -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

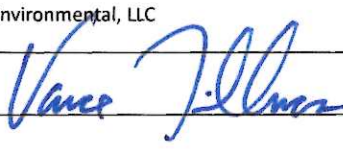
<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input checked="" type="checkbox"/> Wastewater	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	Jeff Goebel	41. Title:	Business Development
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(713) 574-5953		() -	jgoebel@undinellc.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Undine Texas Environmental, LLC	Job Title:	CFO
Name (In Print):	Vance Tillman	Phone:	(713) 574- 5953
Signature:		Date:	07/17/24

Attachment A-2



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by [Title 30, Texas Administrative Code \(30 TAC\), Chapter 39, Subchapter H](#). Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

If you are subject to the alternative language notice requirements in [30 TAC Section 39.426](#), **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Undine Texaws Environmental, LLC (CN_____) proposes to operate Marigold Wastewater Treatment Facility (RN_____), a activated sludge process plant operated in the complete mix mode. The facility will be located at The facility will be located approx. 0.8 miles sw of the intersection of Mathis Rd and Betka Rd Road 902, in 10. Enter city name here, Waller County, Texas 77484. This application for a new discharge with a final phase of 0.125MGD. <<For TLAP applications include the following sentence, otherwise delete:>> This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain contain five-day carbonaceous biochemical oxygen demand (CBOD₅), total suspended solids (TSS), ammonia nitrogen (NH₃-N), and *Escherichia coli*. Domestic wastewater will be treated by an activated sludge process plant and the treatment units will include a bar screen, aeration basins, final clarifiers, sludge digesters, and chlorine contact chambers and De chlorine contact chambers. .

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

1. Introduzca el nombre del solicitante aquí (2. Introduzca el número de cliente aquí (es decir, CN6#####).) 3. Elija del menú desplegable 4. Introduzca el nombre de la instalación aquí 5. Introduzca el número de entidad regulada aquí (es decir, RN1#####), 6. Elija del menú desplegable 7. Introduzca la descripción de la instalación aquí. La instalación 8. Elija del menú desplegable. ubicada en 9. Introduzca la ubicación aquí, en 10. Introduzca el nombre de la ciudad aquí, Condado de 11. Introduzca el nombre del condado aquí, Texas 12. Introduzca el código postal aquí. 13. Introduzca el resumen de la petición de solicitud aquí. <<Para las solicitudes de TLAP incluya la siguiente oración, de lo contrario, elimine:>> Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan 14. Liste todos los contaminantes esperados aquí. 15. Introduzca los tipos de aguas residuales descargadas aquí. 16. Elija del menú desplegable tratado por 17. Introduzca una descripción del tratamiento de aguas residuales utilizado en la instalación aquí.

INSTRUCTIONS

1. Enter the name of applicant in this section. The applicant name should match the name associated with the customer number.
2. Enter the Customer Number in this section. Each Individual or Organization is issued a unique 11-digit identification number called a CN (e.g. CN123456789).
3. Choose "operates" in this section for existing facility applications or choose "proposes to operate" for new facility applications.
4. Enter the name of the facility in this section. The facility name should match the name associated with the regulated entity number.
5. Enter the Regulated Entity number in this section. Each site location is issued a unique 11-digit identification number called an RN (e.g. RN123456789).
6. Choose the appropriate article (a or an) to complete the sentence.
7. Enter a description of the facility in this section. For example: steam electric generating facility, nitrogenous fertilizer manufacturing facility, etc.
8. Choose "is" for an existing facility or "will be" for a new facility.
9. Enter the location of the facility in this section.
10. Enter the City nearest the facility in this section.
11. Enter the County nearest the facility in this section.
12. Enter the zip code for the facility address in this section.
13. Enter a summary of the application request in this section. For example: renewal to discharge 25,000 gallons per day of treated domestic wastewater, new application to discharge process wastewater and stormwater on an intermittent and flow-variable basis, or major amendment to reduce monitoring frequency for pH, etc. If more than one outfall is included in the application, provide applicable information for each individual outfall.
14. List all pollutants expected in the discharge from this facility in this section. If applicable, refer to the pollutants from any federal numeric effluent limitations that apply to your facility.
15. Enter the discharge types from your facility in this section (e.g., stormwater, process wastewater, once through cooling water, etc.)
16. Choose the appropriate verb tense to complete the sentence.
17. Enter a description of the wastewater treatment used at your facility. Include a description of each process, starting with initial treatment and finishing with the outfall/point of disposal. Use additional lines for individual discharge types if necessary.

Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

Example

Individual Industrial Wastewater Application

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

ABC Corporation (CN6000000000) operates the Starr Power Station (RN100000000000), a two-unit gas-fired electric generating facility. Unit 1 has a generating capacity of 393 megawatts (MWs) and Unit 2 has a generating capacity of 528 MWs. The facility is located at 1356 Starr Street, near the City of Austin, Travis County, Texas 78753.

This application is for a renewal to discharge 870,000,000 gallons per day of once through cooling water, auxiliary cooling water, and also authorizes the following waste streams monitored inside the facility (internal outfalls) before it is mixed with the other wastewaters authorized for discharge via main Outfall 001, referred to as "previously monitored effluents" (low-volume wastewater, metal-cleaning waste, and stormwater (from diked oil storage area yards and storm drains)) via Outfall 001. Low-volume waste sources, metal-cleaning waste, and stormwater drains on a continuous and flow-variable basis via internal Outfall 101.

The discharge of once through cooling water via Outfall 001 and low-volume waste and metal-cleaning waste via Outfall 101 from this facility is subject to federal effluent limitation guidelines at 40 CFR Part 423. The pollutants expected from these discharges based on 40 CFR Part 423 are: free available chlorine, total residual chlorine, total suspended solids, oil and grease, total iron, total copper, and pH. Temperature is also expected from these discharges. Additional potential pollutants are included in the Industrial Wastewater Application Technical Report, Worksheet 2.0.

Cooling water and boiler make-up water are supplied by Lake Starr Reservoir. The City of Austin municipal water plant (CN6000000000, PWS 00000) supplies the facility's potable water and serves as an alternate source of boiler make-up water. Water from the Lake Starr Reservoir is withdrawn at the intake structure and treated with sodium hypochlorite to prevent biofouling and sodium bromide as a chlorine enhancer to improve efficacy and then passed through condensers and auxiliary equipment on a once-through basis to cool equipment and condense exhaust steam.

Low-volume wastewater from blowdown of boiler Units 1 and 2 and metal-cleaning wastes receive no treatment prior to discharge via Outfall 101. Plant floor and equipment drains and stormwater runoff from diked oil storage areas, yards, and storm drains are routed through an oil and water separator prior to discharge via Outfall 101. Domestic wastewater, blowdown, and backwash water from the service water filter, clarifier, and sand filter are routed to the Starr Creek Domestic Sewage Treatment Plant, TPDES Permit No. WQ0010000001, for treatment and disposal. Metal-cleaning waste from equipment cleaning is generally disposed of off-site.

Attachment A-3



Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

- ☒ New Permit or Registration Application
☐ New Activity - modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

- ☐ Requires public notice,
☐ Considered to have significant public interest, and
☐ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

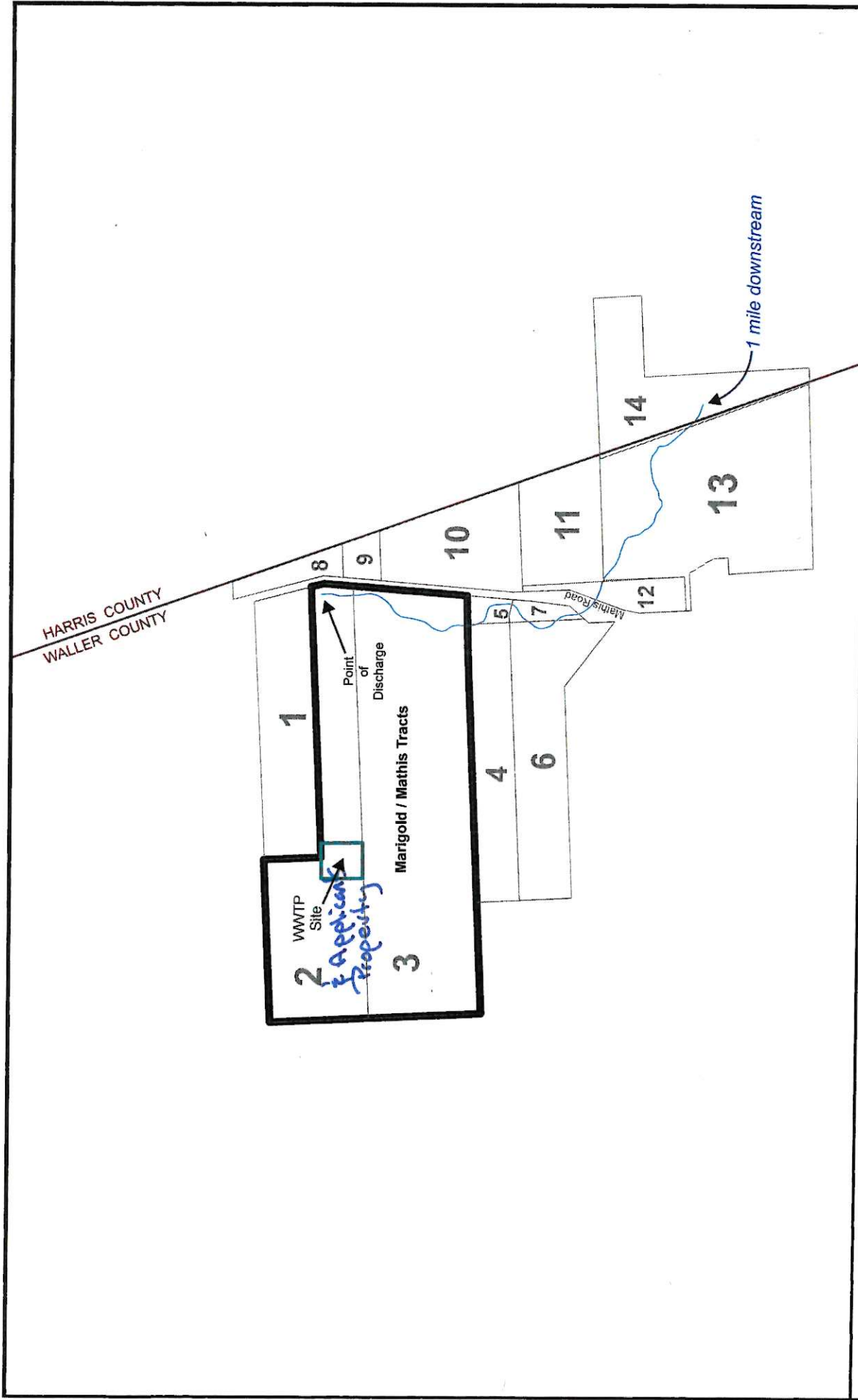
**If all the above boxes are not checked, a Public Involvement Plan is not necessary.
Stop after Section 2 and submit the form.**

- ☒ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

This application is not for an industry which typically has significant public interest

Attachment A-4

Attachment A-5



Adjacent and Downstream Landowners

- Legend**
- Marigold / Mathis Tracts
 - WWTP Site
 - Stream - Mound Creek
 - Parcels - Adjacent and Downstream
 - County Line

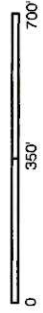
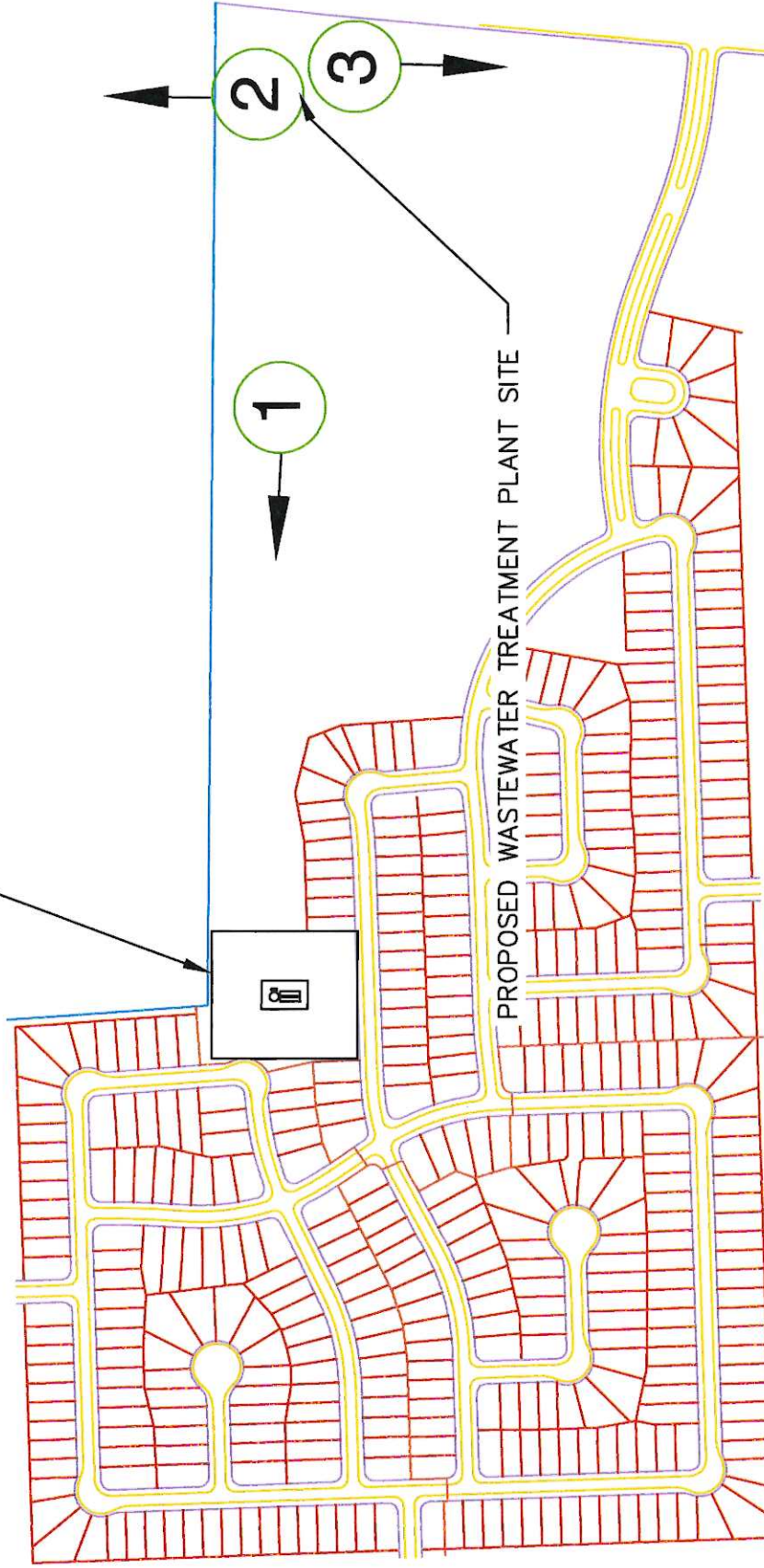


ADJACENT AND DOWNSTREAM PROPERTIES
BY MAP NUMBER

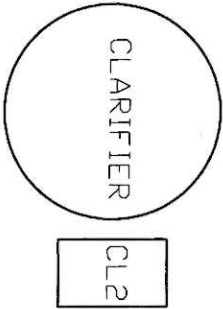
1. SUKHANI MANAGEMENT LLC
16521 MATHIS RD
WALLER TX 77484
2. HEGAR A B TRUST
FOR GLENN A HEGAR
PO BOX 27
HOCKLEY TX 77447
3. HEGAR A B TRUST
FOR GLENN A HEGAR
PO BOX 27
HOCKLEY TX 77447
4. BRILEY KRISTINA
BRILEY BILLY C & KATHY & ALISHA K
PO BOX 698
WALLER TX 77484
5. BRILEY KRISTINA
BRILEY BILLY C & KATHY & ALISHA K
PO BOX 698
WALLER TX 77484
6. WILSON DAMON KENNETH
15983 MATHIS RD
WALLER TX 77484
7. WILSON DAMON KENNETH
15983 MATHIS RD
WALLER TX 77484
8. LEWIS MARNA KAY SHOFNAR
PO BOX 1618
WALLER TX 77484
9. MERIT NDT LLC
1511 LAKE GRAYSON DR
KATY TX 77494
10. HORACE DELTON LAMONTE
PO BOX 1557
WALLER TX 77484
11. SCHWARTZ JUDITH L
3331 DAMICO ST #903
HOUSTON TX 77019
12. SCHWARTZ JUDITH L
3331 DAMICO ST #903
HOUSTON TX 77019
13. REESE SANDRA RUTH
7757 HIDDEN TRAIL
BRYAN TX 77808
14. REESE SANDRA RUTH
7757 HIDDEN TRAIL
BRYAN TX 77808

Attachment A-6

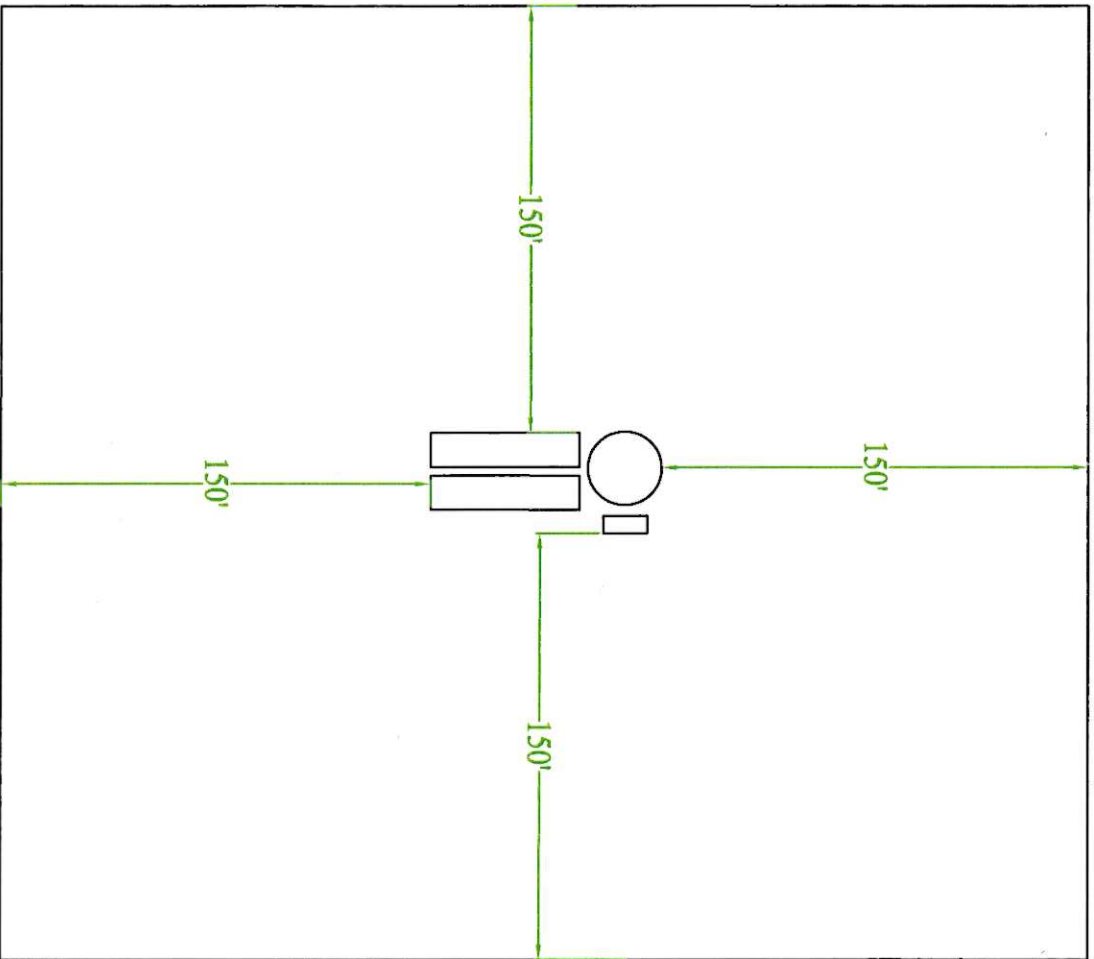
PROPOSED WASTEWATER TREATMENT PLANT SITE



Attachment A-7



UNIT TYPE

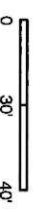


APPLICANTS PROPERTY
AND WASTEWATER
TREATMENT PLANT SITE
AND 150' BUFFERZONE

AREA SERVED

AREA SERVED

AREA SERVED



PHASE I BUFFERZONE

Attachment A-8

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____ Renewal ____ Major Amendment ____ Minor Amendment ____ New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

____ Texas Historical Commission

____ U.S. Fish and Wildlife

____ Texas Parks and Wildlife Department

____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: Undine Texas Environmental, LLC

Permit No. WQ00 _____

EPA ID No. TX _____

Address of the project (or a location description that includes street/highway, city/vicinity, and county):

The facility will be located approx. 0.8 miles sw of the intersection of Mathis Rd and Betka Rd

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Mr

First and Last Name: Jeff Goebel

Credential (P.E, P.G., Ph.D., etc.):

Title: Consultant

Mailing Address: 32002 Pattys Landing

City, State, Zip Code: Magnolia TX 77354

Phone No.: 713-724-9321 Ext.:

Fax No.:

E-mail Address: texaswater@sbcglobal.net

2. List the county in which the facility is located: Johnson
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

The property is not publicly owned

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

To Mound Creek

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

- ☒ Proposed access roads, utility lines, construction easements
- ☐ Visual effects that could damage or detract from a historic property's integrity
- ☐ Vibration effects during construction or as a result of project design
- ☒ Additional phases of development that are planned for the future
- ☐ Sealing caves, fractures, sinkholes, other karst features

☐ Disturbance of vegetation or wetlands

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

None

2. Describe existing disturbances, vegetation, and land use:

Pasture

THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

Not known

4. Provide a brief history of the property, and name of the architect/builder, if known.

Not Known



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION

TECHNICAL REPORT 1.0

For any questions about this form, please contact the Domestic Wastewater Permitting Team at 512-239-4671.

The following information is required for all renewal, new, and amendment applications.

Section 1. Permitted or Proposed Flows (Instructions Page 43)

A. Existing/Interim I Phase

Design Flow (MGD): 0.0625

2-Hr Peak Flow (MGD): 0.25

Estimated construction start date: 7/2025

Estimated waste disposal start date: 1/2026

B. Interim II Phase

Design Flow (MGD): Click to enter text.

2-Hr Peak Flow (MGD): Click to enter text.

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

C. Final Phase

Design Flow (MGD): 0.125

2-Hr Peak Flow (MGD): 0.5

Estimated construction start date: 7/2027

Estimated waste disposal start date: 1/2028

D. Current Operating Phase

Provide the startup date of the facility: Click to enter text.

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

Provide a detailed description of the treatment process. **Include the type of treatment plant, mode of operation, and all treatment units.** Start with the plant's head works and

finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed, a description of each phase must be provided.**

Attachment T-1

B. Treatment Units

In Table 1.0(1), provide the treatment unit type, the number of units, and dimensions (length, width, depth) of each treatment unit, accounting for *all* phases of operation.

Table 1.0(1) – Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Attachment T-1		

C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction.

Attachment: T-2

Section 3. Site Information and Drawing (Instructions Page 44)

Provide the TPDES discharge outfall latitude and longitude. Enter N/A if not applicable.

- Latitude: 30° 0'42.94"N
- Longitude: 95°54'26.66"W

Provide the TLAP disposal site latitude and longitude. Enter N/A if not applicable.

- Latitude: Click to enter text.
- Longitude: Click to enter text.

Provide a site drawing for the facility that shows the following:

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;
- If land disposal of effluent, the boundaries of the disposal site and all storage/holding ponds; and
- If sludge disposal is authorized in the permit, the boundaries of the land application or disposal site.

Attachment: T-3

Provide the name **and** a description of the area served by the treatment facility.

Marigold Subdivision

Collection System Information for wastewater TPDES permits only: Provide information for each **uniquely owned** collection system, existing and new, served by this facility, including satellite collection systems. **Please see the instructions for a detailed explanation and examples.**

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
Marigold	Undine Texas Environmental, LLC	Privately Owned	0
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

Is the application for a renewal of a permit that contains an unbuilt phase or phases?

☐ Yes ☒ No

If yes, does the existing permit contain a phase that has not been constructed **within five years** of being authorized by the TCEQ?

☐ Yes ☒ No

If yes, provide a detailed discussion regarding the continued need for the unbuilt phase. **Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases.**

Click to enter text.

Section 5. Closure Plans (Instructions Page 45)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

☐ Yes ☒ No

If yes, was a closure plan submitted to the TCEQ?

☐ Yes ☒ No

If yes, provide a brief description of the closure and the date of plan approval.

Click to enter text.

Section 6. Permit Specific Requirements (Instructions Page 45)

For applicants with an existing permit, check the Other Requirements or Special Provisions of the permit.

A. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

☐ Yes ☒ No

If yes, provide the date(s) of approval for each phase: Unknown

Provide information, including dates, on any actions taken to meet a *requirement or provision* pertaining to the submission of a summary transmittal letter. **Provide a copy of an approval letter from the TCEQ, if applicable.**

Click to enter text.

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.

Click to enter text.

C. Other actions required by the current permit

Does the *Other Requirements* or *Special Provisions* section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc.

☐ Yes ☒ No

If **yes**, provide information below on the status of any actions taken to meet the conditions of an *Other Requirement* or *Special Provision*.

Click to enter text.

D. Grit and grease treatment

1. Acceptance of grit and grease waste

Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?

☐ Yes ☒ No

If **No**, stop here and continue with Subsection E. Stormwater Management.

2. Grit and grease processing

Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.

Click to enter text.

3. Grit disposal

Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?

☐ Yes ☒ No

If **No**, contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

Click to enter text.

4. Grease and decanted liquid disposal

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.

Describe how the decant and grease are treated and disposed of after grit separation.

Click to enter text.

E. Stormwater management

1. Applicability

Does the facility have a design flow of 1.0 MGD or greater in any phase?

☐ Yes ☒ No

Does the facility have an approved pretreatment program, under 40 CFR Part 403?

☐ Yes ☒ No

If no to both of the above, then skip to Subsection F, Other Wastes Received.

2. MSGP coverage

Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?

☐ Yes ☒ No

If yes, please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:

TXR05 [Click to enter text.](#) or TXRNE [Click to enter text.](#)

If no, do you intend to seek coverage under TXR050000?

☐ Yes ☒ No

3. Conditional exclusion

Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?

☐ Yes ☒ No

If yes, please explain below then proceed to Subsection F, Other Wastes Received:

Click to enter text.

4. Existing coverage in individual permit

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?

☐ Yes ☒ No

If yes, provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.

Click to enter text.

5. Zero stormwater discharge

Do you intend to have no discharge of stormwater via use of evaporation or other means?

☐ Yes ☒ No

If yes, explain below then skip to Subsection F. Other Wastes Received.

Click to enter text.

Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

6. Request for coverage in individual permit

Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?

☐ Yes ☒ No

If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you

intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

Click to enter text.

Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.

Click to enter text.

G. Other wastes received including sludge from other WWTPs and septic waste

1. Acceptance of sludge from other WWTPs

Does or will the facility accept sludge from other treatment plants at the facility site?

☐ Yes ☒ No

If yes, attach sewage sludge solids management plan. See Example 5 of instructions.

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the sludge, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Click to enter text.

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

If yes, does the facility have a Type V processing unit?

☐ Yes ☒ No

If yes, does the unit have a Municipal Solid Waste permit?

☐ Yes ☒ No

If **yes to any of the above**, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the septic waste, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Click to enter text.

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

3. Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)

Is or will the facility accept wastes that are not domestic in nature excluding the categories listed above?

☐ Yes ☒ No

If **yes**, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

Click to enter text.

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 50)

Is the facility in operation?

☐ Yes ☒ No

If **no**, this section is not applicable. Proceed to Section 8.

If **yes**, provide effluent analysis data for the listed pollutants. **Wastewater treatment facilities** complete Table 1.0(2). **Water treatment facilities** discharging filter backwash water, complete Table 1.0(3). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

Note: The sample date must be within 1 year of application submission.

Table1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
<i>E.coli</i> (CFU/100ml) freshwater					
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, μ mohs/cm, †					
Oil & Grease, mg/l					
Alkalinity (CaCO ₃)*, mg/l					

*TPDES permits only

†TLAP permits only

Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO ₃), mg/l					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: **Contract operations**Facility Operator's License Classification and Level: **Contract operations**Facility Operator's License Number: **Contract operations**

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 51)

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- ☐ Design flow \geq 1 MGD
- ☐ Serves \geq 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☒ Biosolids generator
- ☐ Biosolids end user - land application (onsite)
- ☐ Biosolids end user - surface disposal (onsite)
- ☐ Biosolids end user - incinerator (onsite)

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☒ Aerobic Digestion
- ☐ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☐ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☐ Long Term Storage (≥ 2 years)
- ☐ Methane or Biogas Recovery
- ☐ Other Treatment Process: Click to enter text.

C. Biosolids Management

Provide information on the *intended* biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the permit will authorize

all biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Agricultural Land Application	Off-site Third-Party Handler or Preparer	Bulk		Class B: PSRP Aerobic Digestion	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): Attachment T-4

D. Disposal site

Disposal site name: Attachment T-4

TCEQ permit or registration number: Attachment T-4

County where disposal site is located: Attachment T-4

E. Transportation method

Method of transportation (truck, train, pipe, other): Attachment T-4

Name of the hauler: Attachment T-4

Hauler registration number: Attachment T-4

Sludge is transported as a:

Liquid ☐ semi-liquid ☒ semi-solid ☐ solid ☐

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 53)

A. Beneficial use authorization

Does the existing permit include authorization for land application of sewage sludge for beneficial use?

☐ Yes ☒ No

If **yes**, are you requesting to continue this authorization to land apply sewage sludge for beneficial use?

☐ Yes ☒ No

If **yes**, is the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)** attached to this permit application (see the instructions for details)?

☐ Yes ☒ No

B. Sludge processing authorization

Does the existing permit include authorization for any of the following sludge processing, storage or disposal options?

Sludge Composting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Marketing and Distribution of sludge	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Sludge Surface Disposal or Sludge Monofill	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Temporary storage in sludge lagoons	<input type="checkbox"/> Yes	<input type="checkbox"/> No

If **yes** to any of the above sludge options and the applicant is requesting to continue this authorization, is the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)** attached to this permit application?

☐ Yes ☒ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

If yes, complete the remainder of this section. If no, proceed to Section 12.

A. Location information

The following maps are required to be submitted as part of the application. For each map, provide the Attachment Number.

- Original General Highway (County) Map:
Attachment: [Click to enter text.](#)
- USDA Natural Resources Conservation Service Soil Map:
Attachment: [Click to enter text.](#)
- Federal Emergency Management Map:
Attachment: [Click to enter text.](#)
- Site map:
Attachment: [Click to enter text.](#)

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

- ☐ Overlap a designated 100-year frequency flood plain
- ☐ Soils with flooding classification
- ☐ Overlap an unstable area
- ☐ Wetlands
- ☐ Located less than 60 meters from a fault
- ☐ None of the above

Attachment: [Click to enter text.](#)

If a portion of the lagoon(s) is located within the 100-year frequency flood plain, provide the protective measures to be utilized including type and size of protective structures:

[Click to enter text.](#)

B. Temporary storage information

Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in *Section 7 of Technical Report 1.0*.

Nitrate Nitrogen, mg/kg: [Click to enter text.](#)

Total Kjeldahl Nitrogen, mg/kg: [Click to enter text.](#)

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: [Click to enter text.](#)

Phosphorus, mg/kg: [Click to enter text.](#)

Potassium, mg/kg: [Click to enter text.](#)

pH, standard units: [Click to enter text.](#)

Ammonia Nitrogen mg/kg: [Click to enter text.](#)

Arsenic: [Click to enter text.](#)

Cadmium: [Click to enter text.](#)

Chromium: [Click to enter text.](#)

Copper: [Click to enter text.](#)

Lead: [Click to enter text.](#)

Mercury: [Click to enter text.](#)

Molybdenum: [Click to enter text.](#)

Nickel: [Click to enter text.](#)

Selenium: [Click to enter text.](#)

Zinc: [Click to enter text.](#)

Total PCBs: [Click to enter text.](#)

Provide the following information:

Volume and frequency of sludge to the lagoon(s): [Click to enter text.](#)

Total dry tons stored in the lagoons(s) per 365-day period: [Click to enter text.](#)

Total dry tons stored in the lagoons(s) over the life of the unit: [Click to enter text.](#)

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of 1×10^{-7} cm/sec?

☐ Yes ☐ No

If yes, describe the liner below. Please note that a liner is required.

[Click to enter text.](#)

D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the lagoon(s):

[Click to enter text.](#)

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)
Attachment: [Click to enter text.](#)
- Copy of the closure plan
Attachment: [Click to enter text.](#)
- Copy of deed recordation for the site
Attachment: [Click to enter text.](#)
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons
Attachment: [Click to enter text.](#)
- Description of the method of controlling infiltration of groundwater and surface water from entering the site
Attachment: [Click to enter text.](#)
- Procedures to prevent the occurrence of nuisance conditions
Attachment: [Click to enter text.](#)

E. Groundwater monitoring

Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?

☐ Yes ☐ No

If groundwater monitoring data are available, provide a copy. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater as a separate attachment.

Attachment: [Click to enter text.](#)

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 55)

A. Additional authorizations

Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?

☐ Yes ☒ No

If yes, provide the TCEQ authorization number and description of the authorization:

Click to enter text.

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

Is the permittee required to meet an implementation schedule for compliance or enforcement?

☐ Yes ☒ No

If yes to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:

Click to enter text.

Section 13. RCRA/CERCLA Wastes (Instructions Page 55)

A. RCRA hazardous wastes

Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste?

☐ Yes ☒ No

B. Remediation activity wastewater

Has the facility received in the past three years, does it currently receive, or will it receive CERCLA wastewater, RCRA remediation/corrective action wastewater or other remediation activity wastewater?

☐ Yes ☒ No

C. Details about wastes received

If **yes** to either Subsection A or B above, provide detailed information concerning these wastes with the application.

Attachment: [Click to enter text.](#)

Section 14. Laboratory Accreditation (Instructions Page 56)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
 - periodically inspected by the TCEQ; or
 - located in another state and is accredited or inspected by that state; or
 - performing work for another company with a unit located in the same site; or
 - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review 30 TAC Chapter 25 for specific requirements.

The following certification statement shall be signed and submitted with every application. See the Signature Page section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*.

Printed Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Signature: _____

Date: _____

DOMESTIC WASTEWATER PERMIT APPLICATION

TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

Section 1. Justification for Permit (Instructions Page 57)

A. Justification of permit need

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

The area served is proposed to have 405 single family connections. The applicant is requesting a 125,000gpd permit to serve this development. The anticipated time frame for buildout is within 5 years.

B. Regionalization of facilities

For additional guidance, please review [TCEQ's Regionalization Policy for Wastewater Treatment](#)¹.

Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:

1. Municipally incorporated areas

If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas.

Is any portion of the proposed service area located in an incorporated city?

☐ Yes ☒ No ☐ Not Applicable

If yes, within the city limits of: [Click to enter text.](#)

If yes, attach correspondence from the city.

Attachment: [Click to enter text.](#)

If consent to provide service is available from the city, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached.

Attachment: [Click to enter text.](#)

2. Utility CCN areas

Is any portion of the proposed service area located inside another utility's CCN area?

☐ Yes ☒ No

¹ <https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater>

If **yes**, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion.

Attachment: [Click to enter text.](#)

3. *Nearby WWTPs or collection systems*

Are there any domestic permitted wastewater treatment facilities or collection systems located within a three-mile radius of the proposed facility?

☒ Yes ☐ No

If **yes**, attach a list of these facilities and collection systems that includes each permittee's name and permit number, and an area map showing the location of these facilities and collection systems.

Attachment: [Attachment T-5](#)

If **yes**, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

Attachment: [Attachment T-5](#)

If the facility or collection system agrees to provide service, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the facility or collection system versus the cost of the proposed facility or expansion.

Attachment: [Attachment T-5](#)

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

☐ Yes ☒ No

If **no**, proceed to Item B, Proposed Organic Loading.

If **yes**, provide organic loading information in Item A, Current Organic Loading

A. **Current organic loading**

Facility Design Flow (flow being requested in application): [Click to enter text.](#)

Average Influent Organic Strength or BOD₅ Concentration in mg/l: [Click to enter text.](#)

Average Influent Loading (lbs/day = total average flow X average BOD₅ conc. X 8.34): [Click to enter text.](#)

Provide the source of the average organic strength or BOD₅ concentration.

[Click to enter text.](#)

B. Proposed organic loading

This table must be completed if this application is for a facility that is not in operation or if this application is to request an increased flow that will impact organic loading.

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality	0.125	300
Subdivision		
Trailer park – transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources	0.125	
AVERAGE BOD ₅ from all sources		300

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 59)

A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: Click to enter text.

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: [Click to enter text.](#)

Total Suspended Solids, mg/l: [Click to enter text.](#)

Ammonia Nitrogen, mg/l: [Click to enter text.](#)

Total Phosphorus, mg/l: [Click to enter text.](#)

Dissolved Oxygen, mg/l: [Click to enter text.](#)

Other: [Click to enter text.](#)

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: [Click to enter text.](#)

Total Phosphorus, mg/l: [Click to enter text.](#)

Dissolved Oxygen, mg/l: [Click to enter text.](#)

Other: [Click to enter text.](#)

D. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 2 mg/l after 20 minutes detention time at peak flow

Dechlorination process: None

☐ Ultraviolet Light: [Click to enter text.](#) seconds contact time at peak flow

☐ Other: [Click to enter text.](#)

Section 4. Design Calculations (Instructions Page 59)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

Attachment: Attachment T-6

Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

Will the proposed facilities be located above the 100-year frequency flood level?

☒ Yes ☐ No

If **no**, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

[Click to enter text.](#)

Provide the source(s) used to determine 100-year frequency flood plain.

Engineering

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

☐ Yes ☒ No

If **yes**, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

☐ Yes ☒ No

If **yes**, provide the permit number: [Click to enter text.](#)

If **no**, provide the approximate date you anticipate submitting your application to the Corps: [Click to enter text.](#)

B. Wind rose

Attach a wind rose: [Attachment T-7](#)

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

A. Beneficial use authorization

Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?

☐ Yes ☒ No

If **yes**, attach the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)**: [Click to enter text.](#)

B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

- ☐ Sludge Composting
- ☐ Marketing and Distribution of sludge
- ☐ Sludge Surface Disposal or Sludge Monofill

If **any of the above**, sludge options are selected, attach the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)**: [Click to enter text.](#)

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 61)

Attach a solids management plan to the application.

Attachment: [T-8](#)

The sewage sludge solids management plan must contain the following information:

- Treatment units and processes dimensions and capacities
- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow

- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 64)

Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?

☐ Yes ☒ No

If **no**, proceed to Section 2. If **yes**, provide the following:

Owner of the drinking water supply: [Click to enter text.](#)

Distance and direction to the intake: [Click to enter text.](#)

Attach a USGS map that identifies the location of the intake.

Attachment: [Click to enter text.](#)

Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

If **no**, proceed to Section 3. If **yes**, complete the remainder of this section. If no, proceed to Section 3.

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: [Click to enter text.](#)

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☐ No

If **yes**, provide the distance and direction from outfall(s).

[Click to enter text.](#)

C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s).

[Click to enter text.](#)

Section 3. Classified Segments (Instructions Page 64)

Is the discharge directly into (or within 300 feet of) a classified segment?

☒ Yes ☐ No

If **yes**, this Worksheet is complete.

If **no**, complete Sections 4 and 5 of this Worksheet.

Section 4. Description of Immediate Receiving Waters (Instructions Page 65)

Name of the immediate receiving waters: Mound Creek

A. Receiving water type

Identify the appropriate description of the receiving waters.

☒ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: Click to enter text.

Average depth of the entire water body, in feet: Click to enter text.

Average depth of water body within a 500-foot radius of discharge point, in feet:
Click to enter text.

☐ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: Click to enter text.

B. Flow characteristics

If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area *upstream* of the discharge. For new discharges, characterize the area *downstream* of the discharge (check one).

☐ Intermittent - dry for at least one week during most years

☐ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses

☐ Perennial - normally flowing

Check the method used to characterize the area upstream (or downstream for new dischargers).

☐ USGS flow records

☐ Historical observation by adjacent landowners

☐ Personal observation

☐ Other, specify: Click to enter text.

Attachment T-1

Facility Dimensions & Facility Features

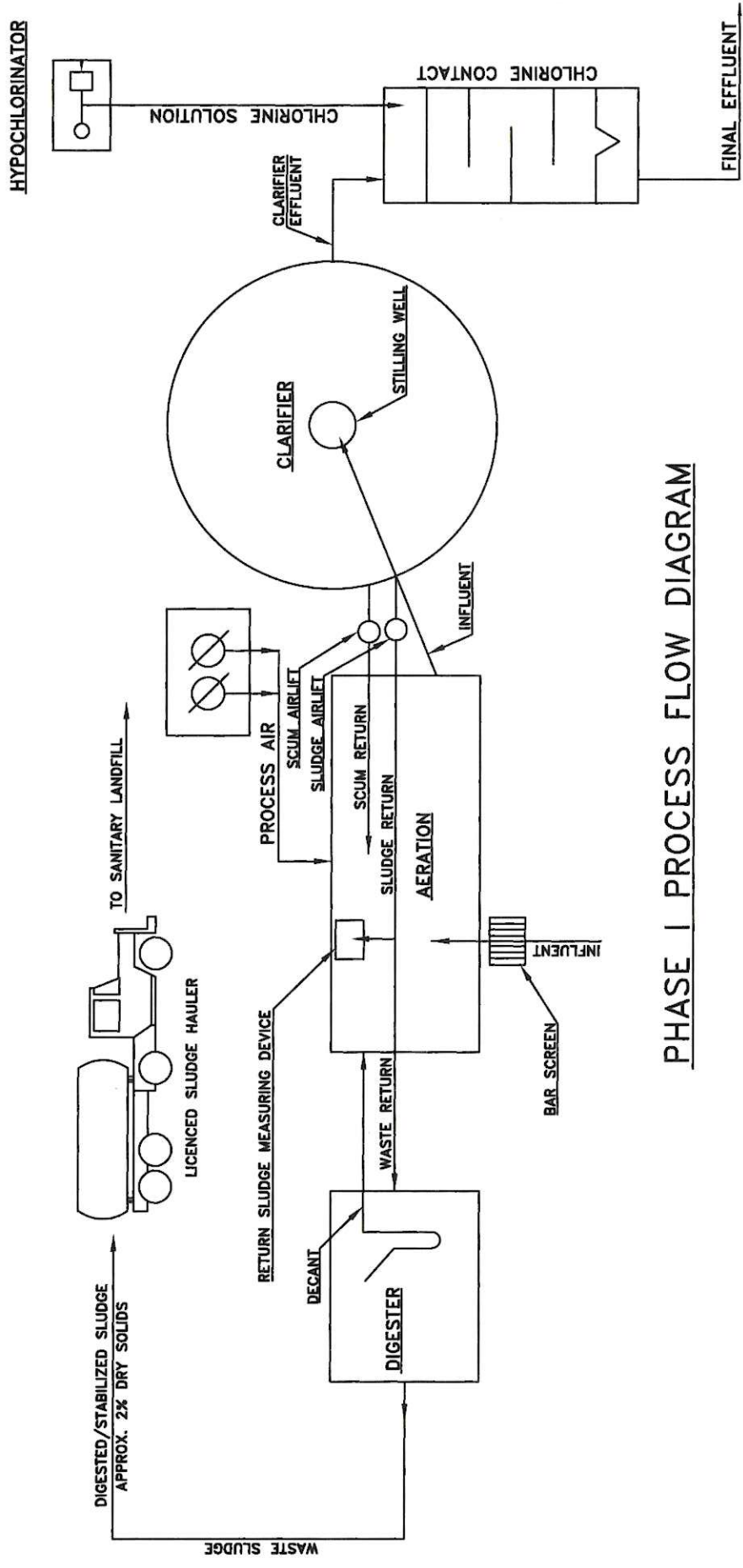
The facility will employ the complete mix variation of the activated sludge process designed for single stage nitrification - From the lift station the wastewater will travel through a coarse barscreen then to the complete mix basin; from the basin the mix-liquor will be transferred to the clarifier where solids will be settled out and clear water will flow over the weirs then into the chlorine contact basin. The settled solids will either be transferred to the digester or returned to the headworks.

Phase I - 0.0625 MGD				
Unit	Number of Units	Length	Width	Height
Clarifier	1		26' Dia	12'
Chloring Contact	1	12'	18'	12'
Aeration	1	35'	12'	12'
Digester	1	25'	12'	12'

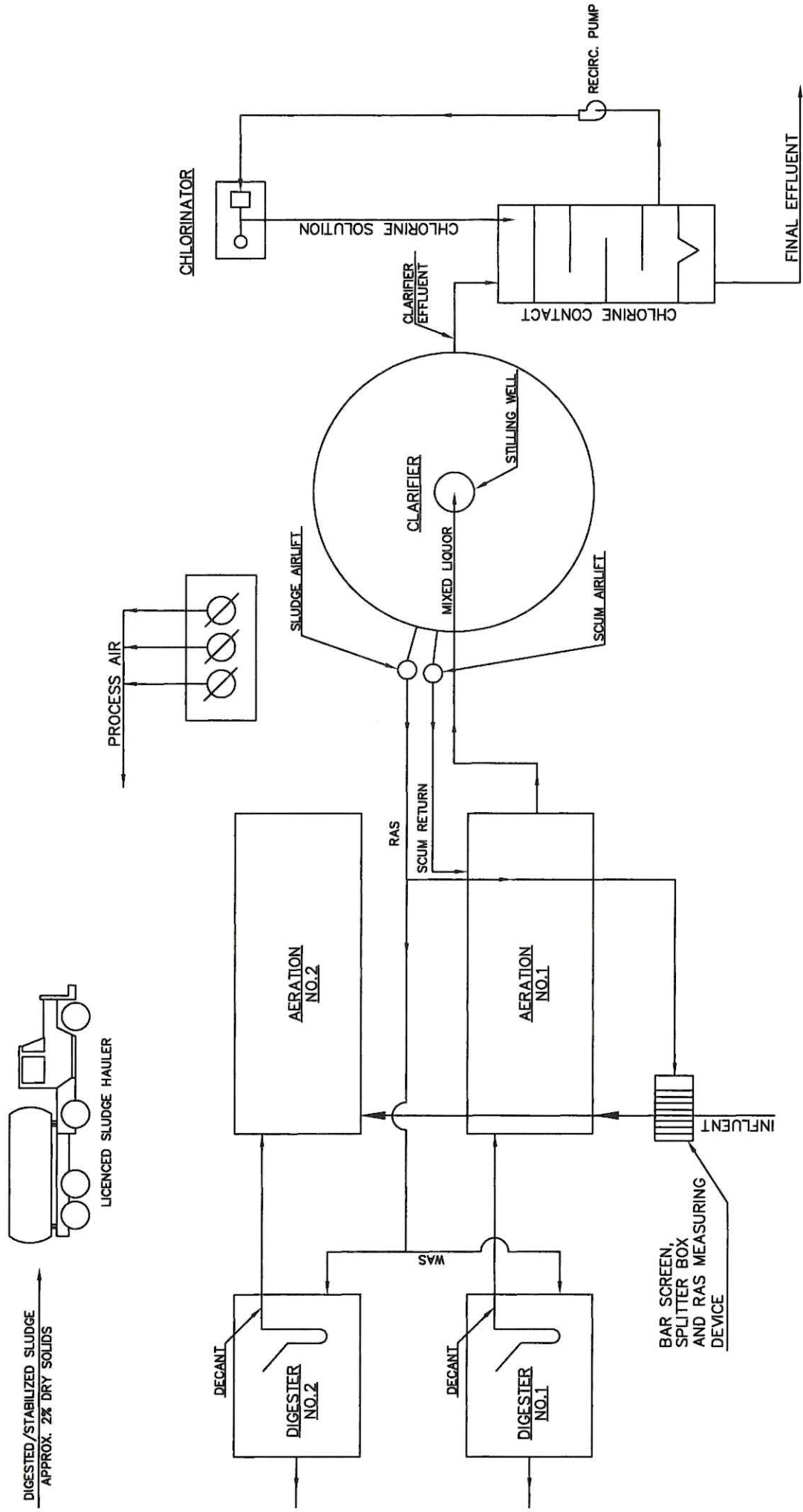
Phase II - 0.125 MGD				
Unit	Number of Units	Length	Width	Height
Clarifier	1		26' Dia	12'
Chloring Contact	1	12'	18'	12'
Aeration	2	35'	12'	12'
Digester	2	25'	12'	12'

- For short power outages the sewage will be contained in the collection system. The plant features digesters, chlorinator, and stand-by blowers. The plant is to be maintained and operated by personnel licensed by the State of Texas.
- The plant is designed to be maintained without bypassing. Replacement or repair of the interior coating system is the only maintenance item that would necessitate bypassing and the epoxy system should last 25-30 years.
- An intruder resistant fence will be placed around the facility.
- A generator will be placed at the facility with automatic transfer switch for power outages

Attachment T-2



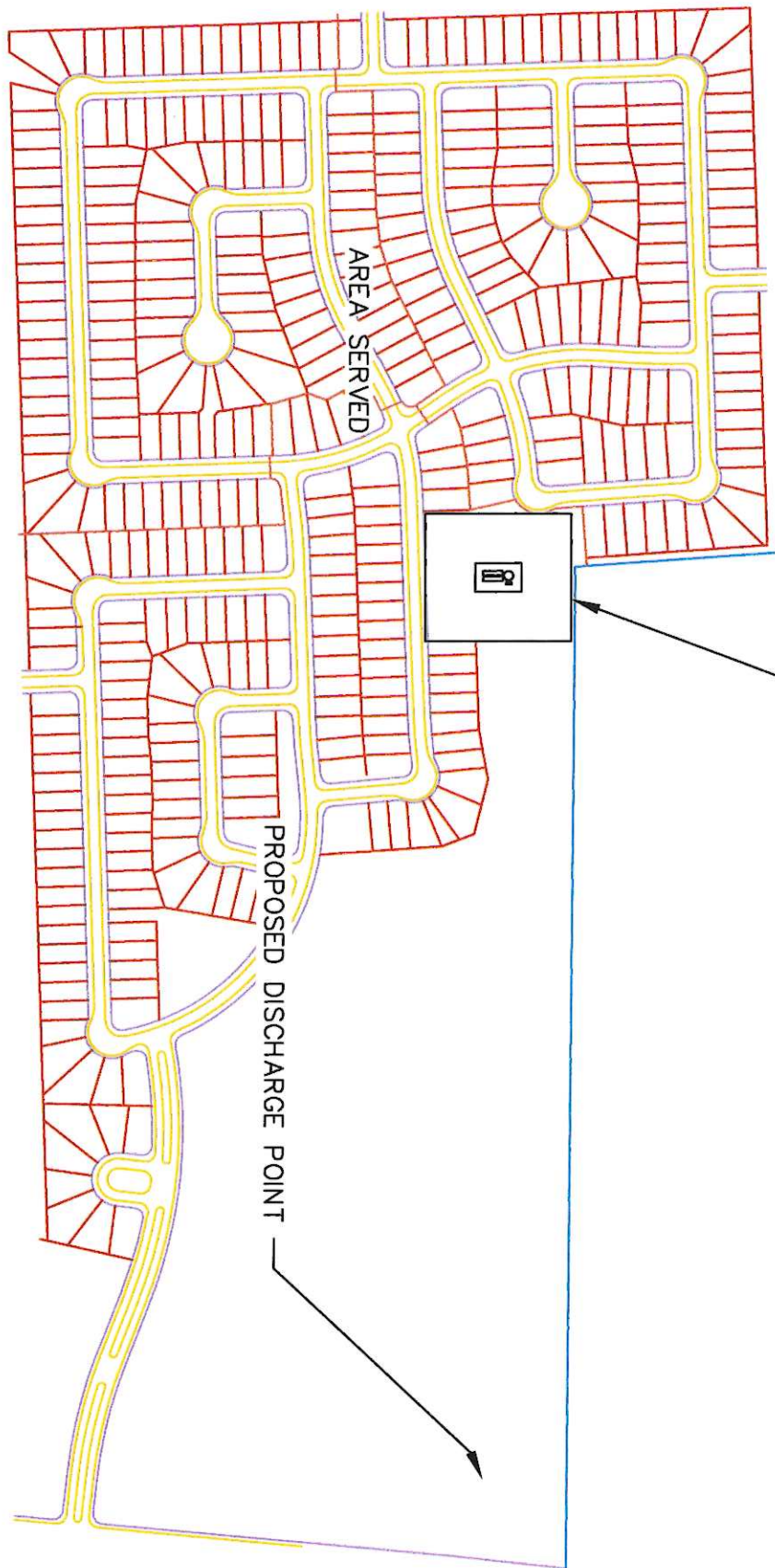
PHASE I PROCESS FLOW DIAGRAM



PHASE III PROCESS FLOW DIAGRAM

Attachment T-3

PROPOSED WASTEWATER TREATMENT PLANT SITE
WITH BUFFERZONE



SITE DRAWING

Attachment T-4

Plant: Marigold
TCEQ Permit: Pending

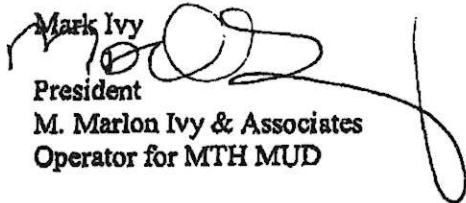
Date: 7/15/2024

To Whom It May Concern:

Mount Houston Road Municipal Utility District, owner of a Waste Water Treatment Plant (Permit #WQ0011154001) located approximately 1.3 miles northwest of the intersection of State Highway 249 and Veterans Memorial Drive, Houston, Texas, and Magna Flow Environmental, owner of the Processing Permit (Permit #WQ0005023000)

Magna Flow Environmental and Mount Houston Road Municipal Utility District have entered into a contractual agreement, where Magna Flow Environmental (T.C.E.Q. Transporter Permit # 21484) will dewater sewage sludge from other waste treatment plants at the Mount Houston Road Municipal Utility District treatment plant. Dewatered Sludge will then be disposed of at a T.C.E.Q. permitted disposal site. Mount Houston Road Municipal Utility District has the capacity to accept sludge from the above mentioned plant.

Magna Flow Environmental agrees to accept and be responsible for the sludge dewatered at the plant. We will maintain responsibility for the life of the permit.


Mark Ivy
President
M. Marlon Ivy & Associates
Operator for MTH MUD


Jerry McCurtain
Vice President
Magna Flow Environmental

Attachment T-5

LIST OF FACILITIES WITHIN 3-MILES

1. City of Waller
PO Box 239
Waller Texas 77484
WQ0010310-001

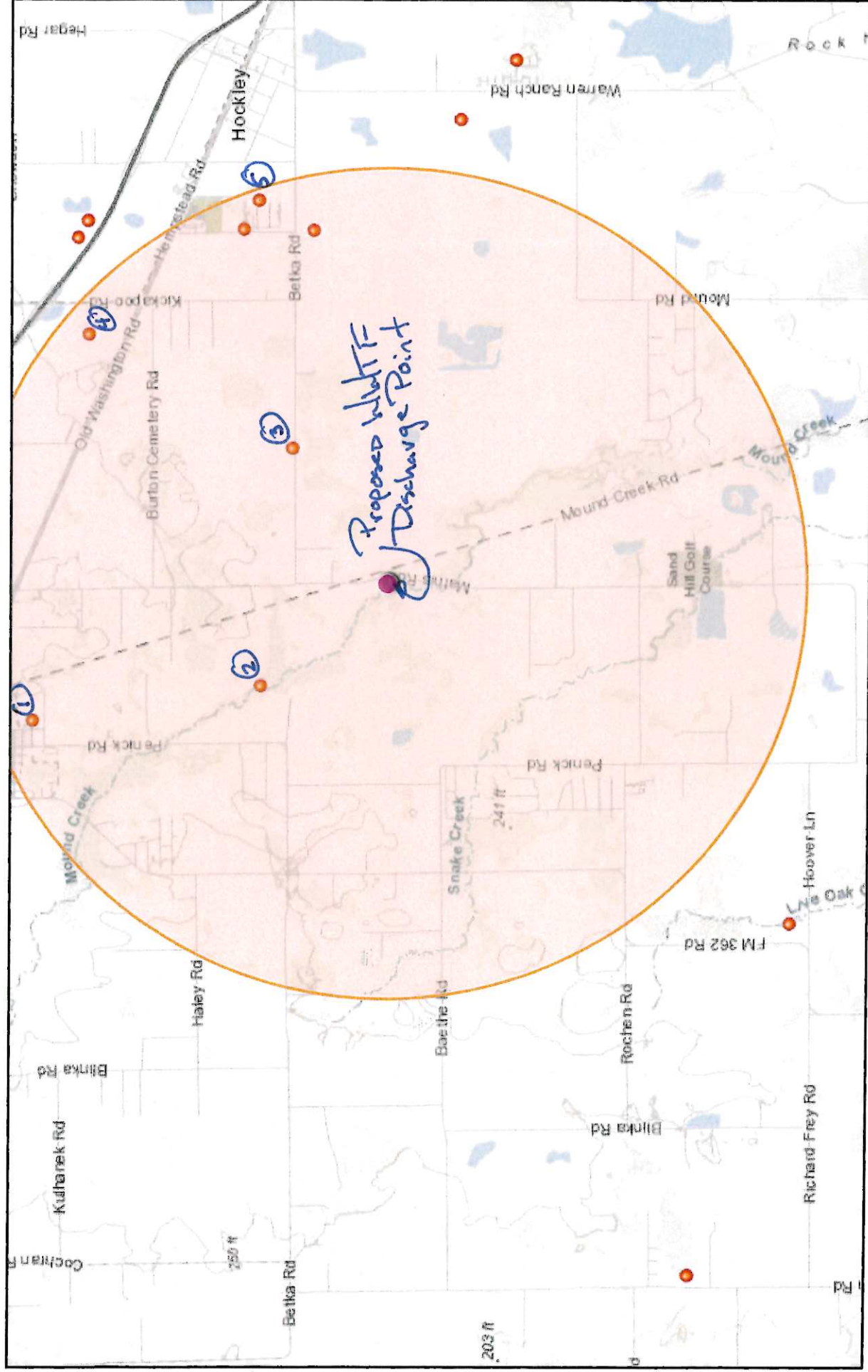
2. Quadvest, L.P.
26926 FM 2978 Road
Magnolia Texas 77354
WQ0015969-001

3. Brian Fogarty, VP
Century Land Holdings of Texas LLC
333 Cypress Run, Suite 200
Houston, Texas 77094
WQ0016117001

4. 290 Kickapoo Development, Inc
21021 Spring Brook Plaza Drive
Suite 215
Spring Texas 77379
WQ0015483001

5. Alexandra Creany
Director of EHS Curry Rail Services, Inc
1425 11th Avenue
Altoona, Pennsylvania 16601
WQ0013472001

Wastewater Outfalls in Texas



7/16/2024, 3:19:12 PM

● Wastewater Outfalls

1:72,224

0 0.5 1 1.5 2 mi
0 0.75 1.5 3 km

TCEQ, City of Houston, HPB, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METINASA, NGA, EPA, USDA

Web AppBuilder for ArcGIS

July 17, 2024

via Certified Mail

City of Waller
PO Box 239
Waller Texas 77484

Re: Texas Commission on Environmental Quality
Wastewater Discharge Permit Application
Regionalization
Mayfield West Wastewater treatment Facility

To Whom It May Concern:

Undine Texas Environmental, LLC is preparing a new wastewater discharge permit in Waller County. One of the items to be addressed by the Texas Commission on Environmental Quality in a wastewater discharge permit application is regionalization. As part of this process, we are to investigate the feasibility of obtaining capacity for our 0.0.125 MGD wastewater flow from a neighboring facility.

Is it possible for your utility to accept 0.125MGD from the proposed development?

_____ YES _____ NO

By: _____ Date: _____

Please date, sign and return your reply via email to jgoebel@undinellc.com

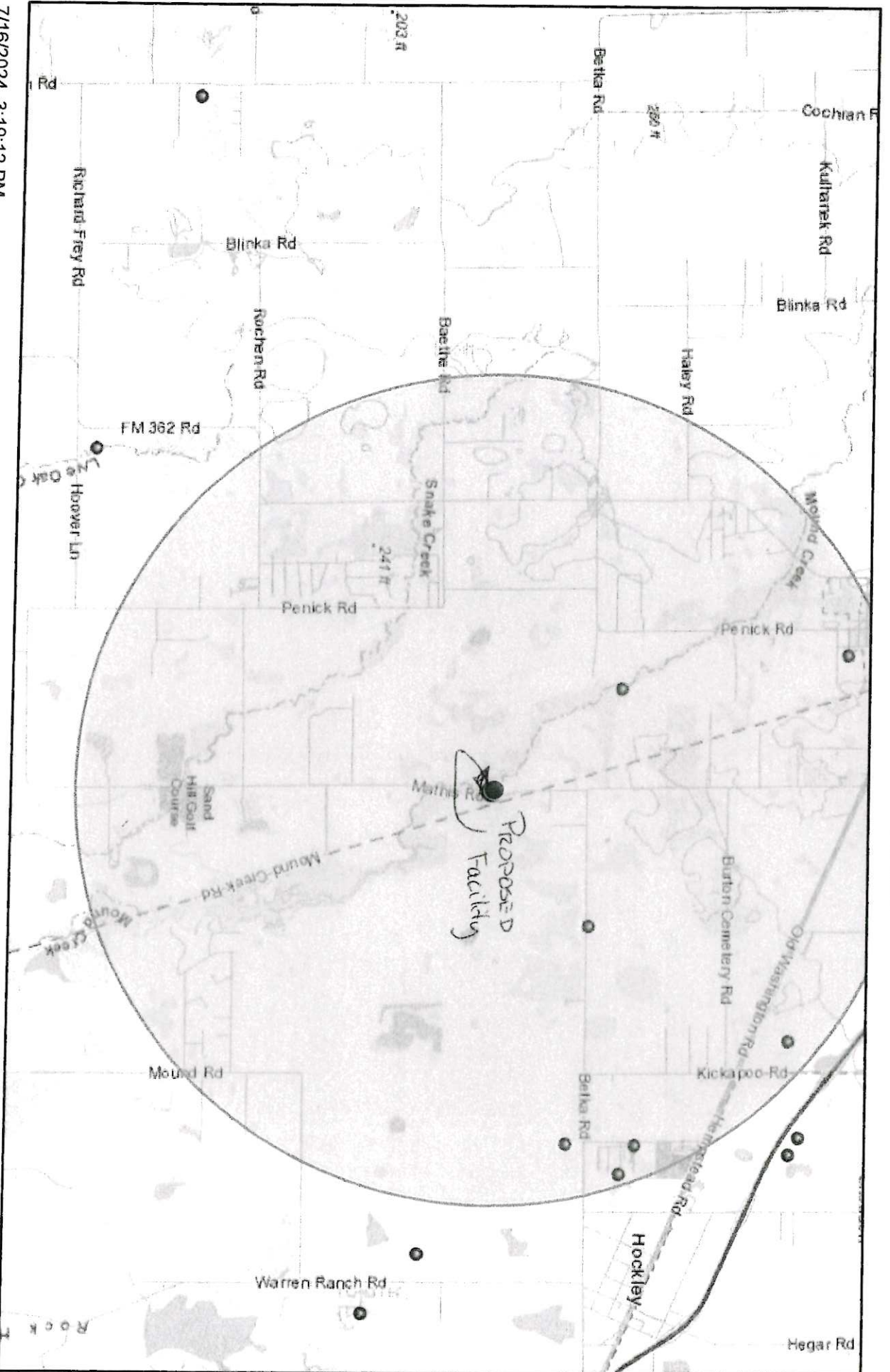
If you have any questions, please do not hesitate to contact me.

Thank you,


Jeff Goebel
713-724-9321



Wastewater Outfalls in Texas



7/16/2024, 3:19:12 PM

Wastewater Outfalls

July 17, 2024

via Certified Mail

Quadvest, L.P.
26926 FM 2978 Road
Magnolia Texas 77354

Re: Texas Commission on Environmental Quality
Wastewater Discharge Permit Application
Regionalization
Mayfield West Wastewater treatment Facility

To Whom It May Concern:

Undine Texas Environmental, LLC is preparing a new wastewater discharge permit in Waller County. One of the items to be addressed by the Texas Commission on Environmental Quality in a wastewater discharge permit application is regionalization. As part of this process, we are to investigate the feasibility of obtaining capacity for our 0.0.125 MGD wastewater flow from a neighboring facility.

Is it possible for your utility to accept 0.125MGD from the proposed development?
_____YES _____NO

By: _____ Date: _____

Please date, sign and return your reply via email to jgoebel@undinellc.com

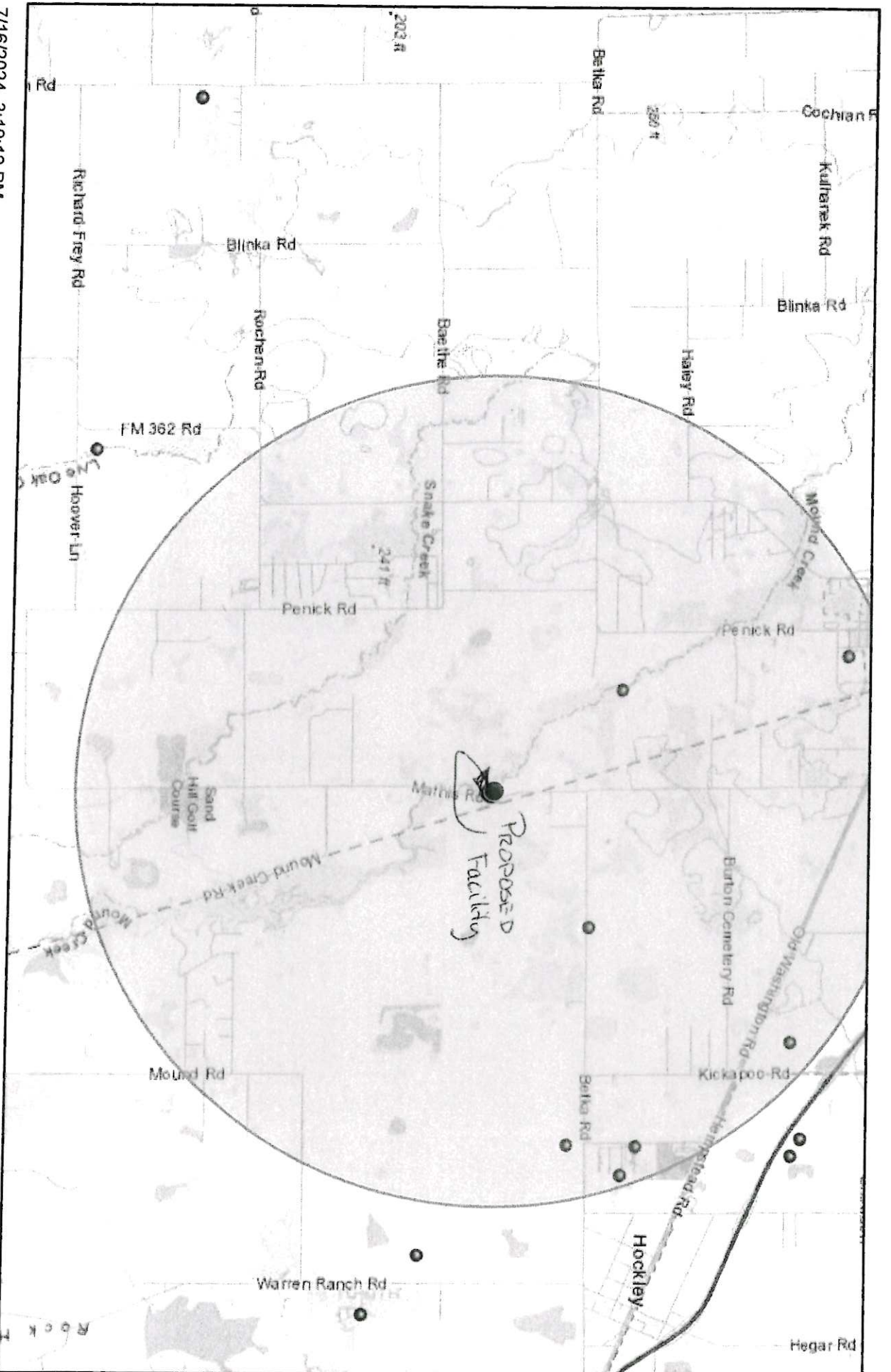
If you have any questions, please do not hesitate to contact me.

Thank you,


Jeff Goebel
713-724-9321



Wastewater Outfalls in Texas



7/16/2024, 3:19:12 PM

Wastewater Outfalls

July 17, 2024

via Certified Mail

Brian Fogarty, VP
Century Land Holdings of Texas LLC
333 Cypress Run, Suite 200
Houston, Texas 77094

Re: Texas Commission on Environmental Quality
Wastewater Discharge Permit Application
Regionalization
Mayfield West Wastewater treatment Facility

To Whom It May Concern:

Undine Texas Environmental, LLC is preparing a new wastewater discharge permit in Waller County. One of the items to be addressed by the Texas Commission on Environmental Quality in a wastewater discharge permit application is regionalization. As part of this process, we are to investigate the feasibility of obtaining capacity for our 0.0.125 MGD wastewater flow from a neighboring facility.

Is it possible for your utility to accept 0.125MGD from the proposed development?
_____ YES _____ NO

By: _____ Date: _____

Please date, sign and return your reply via email to jgoebel@undinellc.com

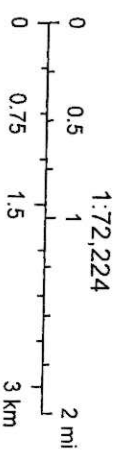
If you have any questions, please do not hesitate to contact me.

Thank you,


Jeff Goebel
713-724-9321



Wastewater Outfalls



July 17, 2024

via Certified Mail

290 Kickapoo Development, Inc
21021 Spring Brook Plaza Drive
Suite 215
Spring Texas 77379

Re: Texas Commission on Environmental Quality
Wastewater Discharge Permit Application
Regionalization
Mayfield West Wastewater treatment Facility

To Whom It May Concern:

Undine Texas Environmental, LLC is preparing a new wastewater discharge permit in Waller County. One of the items to be addressed by the Texas Commission on Environmental Quality in a wastewater discharge permit application is regionalization. As part of this process, we are to investigate the feasibility of obtaining capacity for our 0.0.125 MGD wastewater flow from a neighboring facility.


Is it possible for your utility to accept 0.125MGD from the proposed development?
_____YES _____NO

By: _____ Date: _____

Please date, sign and return your reply via email to jgoebel@undinellc.com

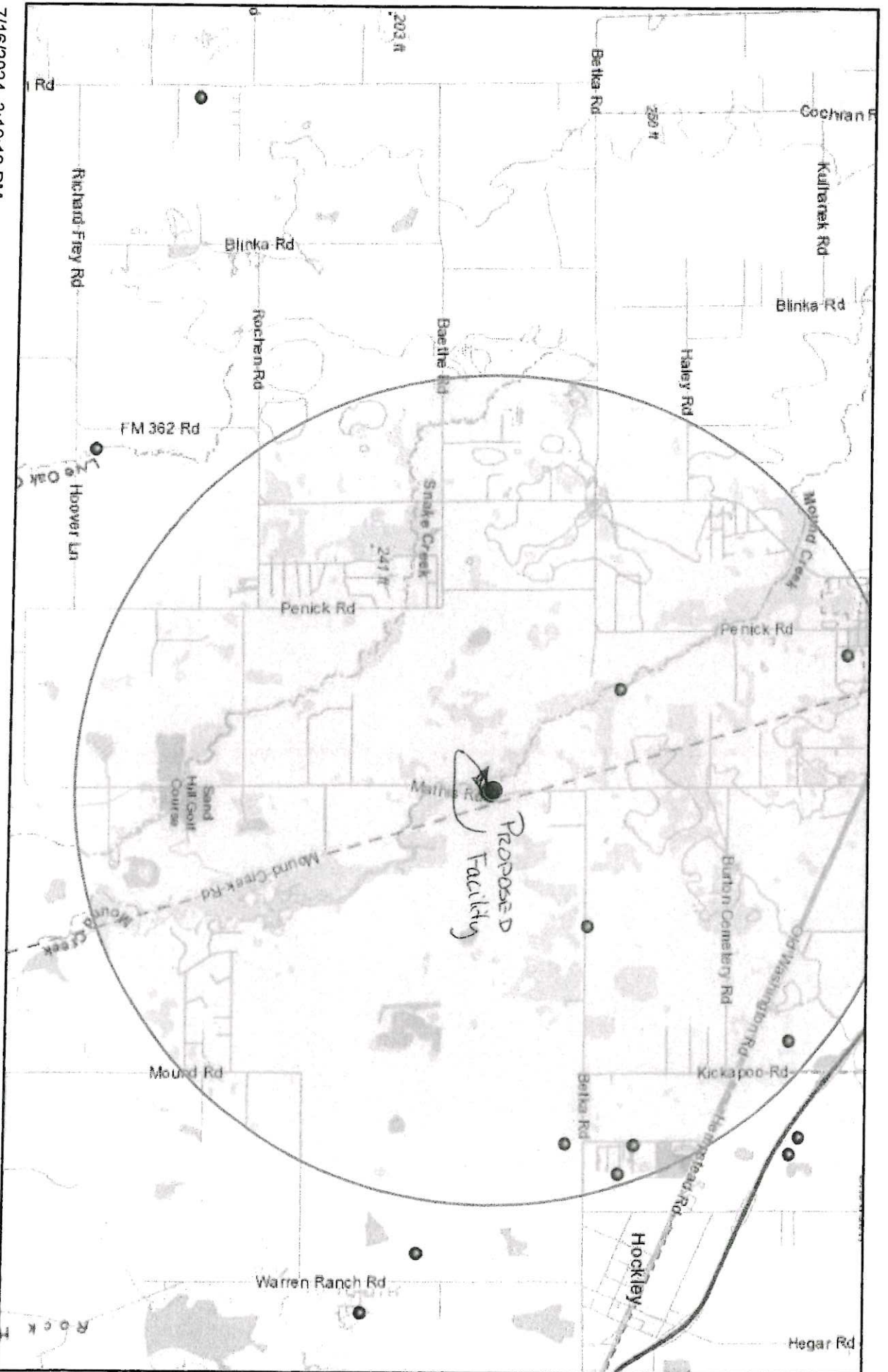
If you have any questions, please do not hesitate to contact me.

Thank you,


Jeff Goebel
713-724-9321



Wastewater Outfalls in Texas



7/16/2024, 3:19:12 PM

Wastewater Outfalls

July 17, 2024

via Certified Mail

Alexandra Creany
Director of EHS Curry Rail Services, Inc
1425 11th Avenue
Altoona, Pennsylvania 16601

Re: Texas Commission on Environmental Quality
Wastewater Discharge Permit Application
Regionalization
Mayfield West Wastewater treatment Facility

To Whom It May Concern:

Undine Texas Environmental, LLC is preparing an Amendment to their existing wastewater discharge permit a in Waller County. One of the items to be addressed by the Texas Commission on Environmental Quality in a wastewater discharge permit application is regionalization. As part of this process, we are to investigate the feasibility of obtaining capacity for our 0.0.125 MGD wastewater flow from a neighboring facility

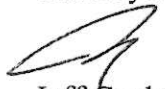
Is it possible for your utility to accept 0.125MGD from the proposed development?
_____YES _____NO

By: _____ Date: _____

Please date, sign and return your reply via email to jgoebel@undinellc.com

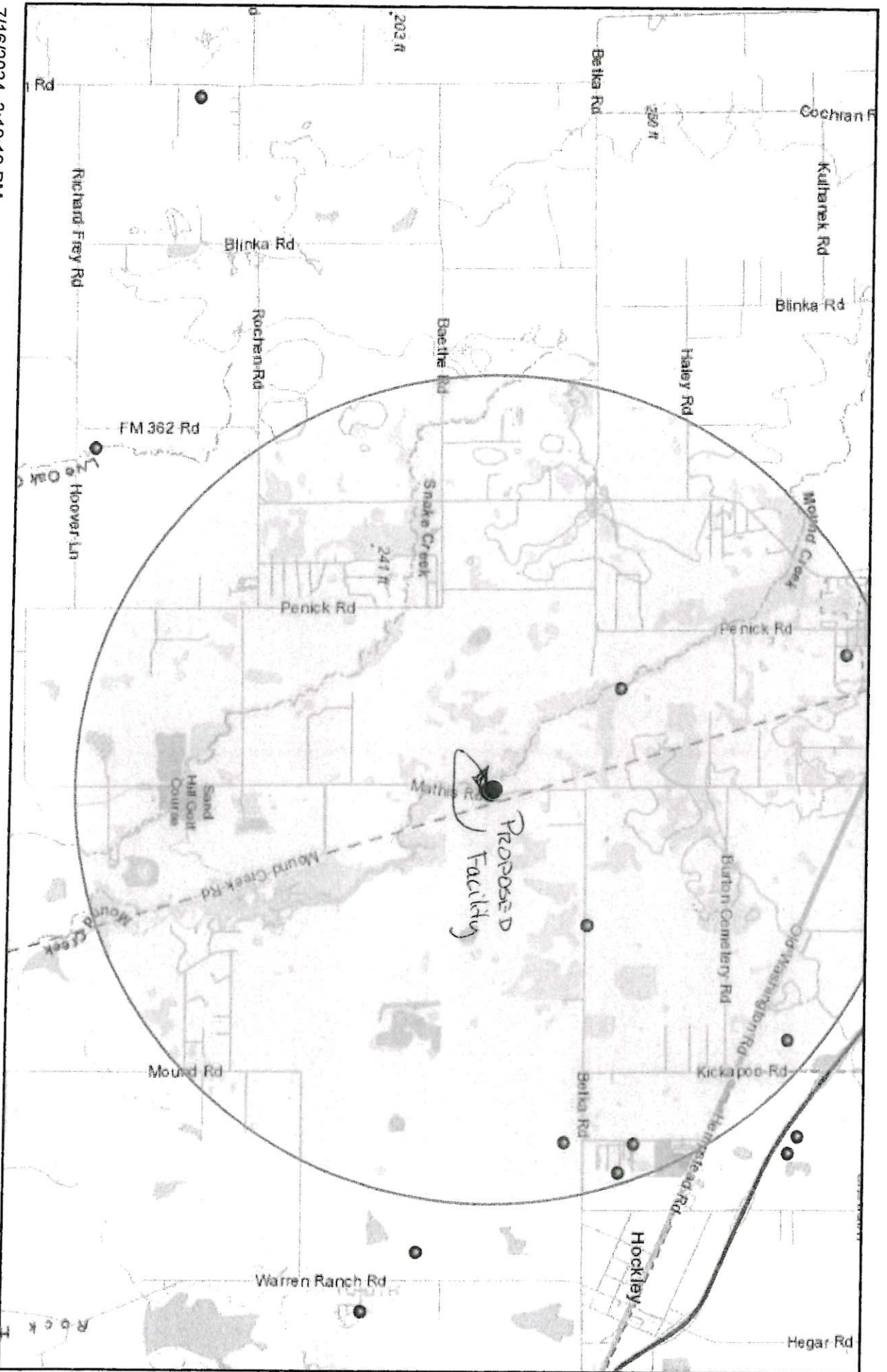
If you have any questions, please do not hesitate to contact me.

Thank you,


Jeff Goebel
713-724-9321



Wastewater Outfalls in Texas



Wastewater Outfalls

7/16/2024, 3:19:12 PM

Attachment T-6

TECHNICAL DESIGN REPORT

FOR

Marigold Wastewater Treatment Facility

1. **PURPOSE** The purpose of this report is to present the basis of design and summary of unitizing and hydraulic calculations for the Sewage Treatment Plant.
2. **DESCRIPTION OF PROPERTY** The project under development is a residential community
3. **POPULATION SERVED** The location of the proposed facility is shown on Sheet One of the Plans. The population flow is based on 100 gallons per capita per day.
4. **INFLUENT QUALITY CHARACTERISTICS** The raw sewage quality characteristics used for design are estimates based on past experience and on State Design Criteria and are as follows:

<u>PARAMETER</u>	<u>CONCENTRATION - MG/L</u>	<u>PER CAPITA CONTRIBUTION - LB/DAY</u>
BOD5	300	0.1668
TSS	300	0.2000

5. **INFLUENT FLOW CHARACTERISTICS** The hydraulic design of the plant must be conservative to insure that the plant will operate under the most extreme conditions anticipated. Future enlargement to the plant will be based on actual influent flow data. The plant process and hydraulic design for this phase are based on the following flows:

First Phase		
Average Daily Flow (Qav)	62,500 GPD	43 GPM
Peak 2-Hr. Flow (Qpk) 4	250,000 GPD	174 GPM
Second Phase		
Average Daily Flow (Qav)	125,000 GPD	87 GPM
Peak 2-Hr. Flow (Qpk) 4	500,000 GPD	347 GPM

Refer to Attachment "A" - Process Design Calculations, Hydraulic Profile Calculations, Process Flow Diagrams, and Plant Discharge relationship for the 100 year flood.

6. **PROCESS DESIGN** The Sewage Treatment Plant has been designed to produce an effluent in compliance with permitted parameters of: BOD5 = 10 mg/l, TSS = 15 mg/l, and Chlorine Residual = 1mg/l after 20 minutes contact

Compressed air will be supplied to the process units by multiple blowers.

7. **FLOOD HAZARD ANALYSIS** The 100 Year Flood Elevation is ____ feet and is confined to the flood control and drainage, which has a bank elevation of ____ feet. The plant is capable of discharging at peak flow against the 100 year flood elevation.

8. **SLUDGE DISPOSAL**

Digester..... Aerobic
Transportation... Contract Hauler
Final Disposition To be Determined by Contract Hauler

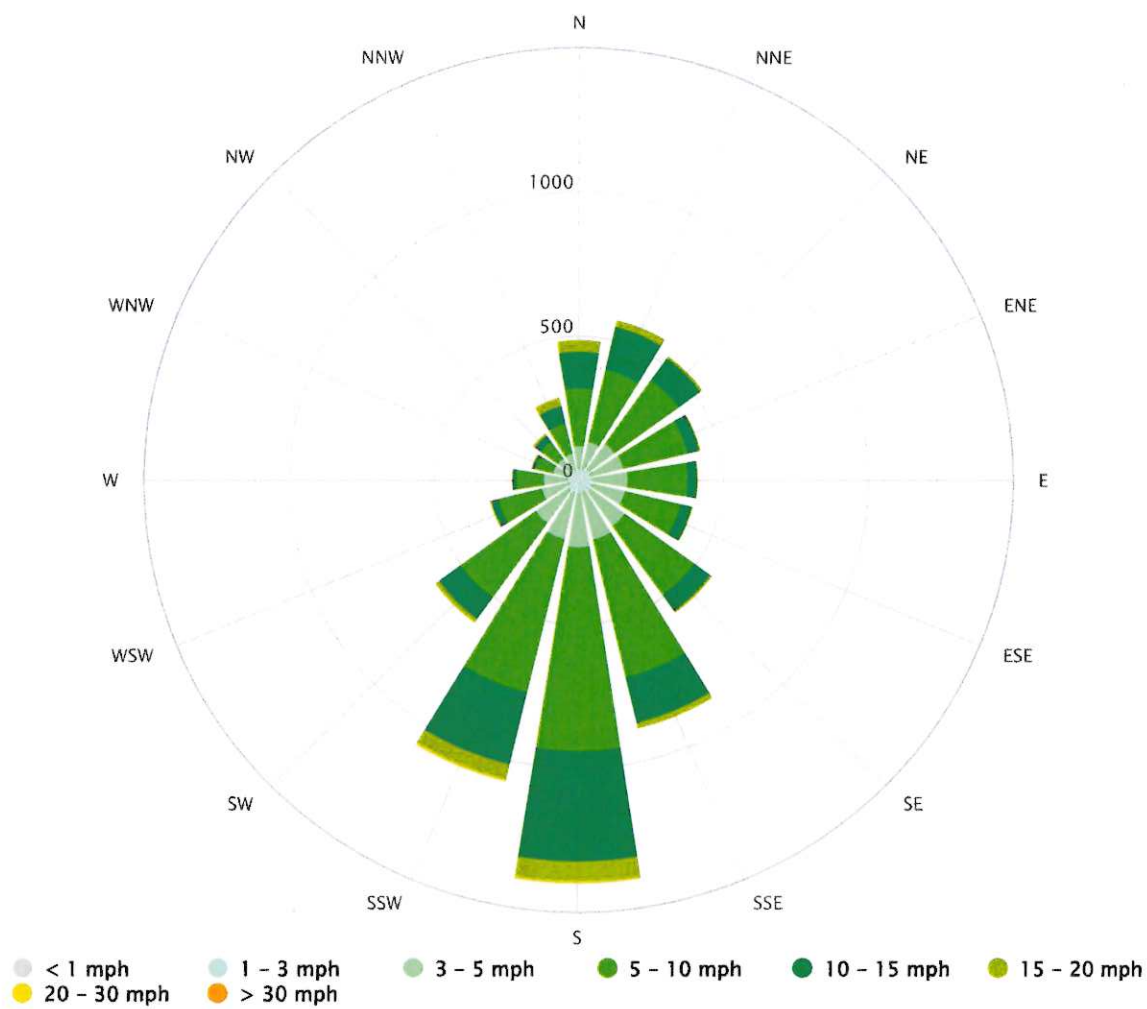
Proposed Organic Loading

<u>Influent Conditions</u>	First Phase		Second Phase	
	GPD	GPM	GPD	GPM
Average Daily Flow - Qav	62,500	43	125,000	87
2hr. Peak Flow (Qpk)	250,000	174	500,000	347
BOD ₅ (lbs/day)@.1668 lb/capita	156.375		312.75	
2 hr AverageFlow (Qav) cf/sec	0.10		0.19	
2 hr Peak Flow (Qpk) cf/sec	0.39		0.77	
<u>Effluent (30 Day Average)</u>				
BOD ₅ (mg/l)	300			
TSS (mg/l)	300			
<u>Process Loadings</u>				
MLSS (mg/l)	3000			
RASS (mg/l)	6000			
<u>Aeration</u>				
Total Aeration Vol. Available	4481.4 cf		8962.8 cf	
Organic Loading (lbs/day/1000cu ft)	34.9 lbs		34.9 lbs	
TCEQ Maximum Organic Loading lbs/day/1000cu ft	35 lbs		35 lbs	
<u>Digester</u>				
Total Volume Available	3201 cf		6402 cf	
Digester Loadings (Vol.) / (lbs BOD ₅)	20.5 cf/lb		20.5 cf/lb	
TCEQ Minimum Volume for Organic Loading	20 cf/lb		20 cf/lb	
Retention Time (Vol) / (BOD ₅)(1.1355)	18.0 days		18.0 days	
<u>Clarifier</u>				
Diameter	26 ft (Dia "A") 0 ft (Dia "B") 0 ft (Dia "C");		26 ft (Dia "A") 0 ft (Dia "B") 0 ft (Dia "C")	
Area	530.9 sf		530.9 sf	
TCEQ Maximum Surface Loading @ Qav	1,200 GPD/sf		1,200 GPD/sf	
Surface Loading @ Qpk	470.87 GPD/sf		941.75 GPD/sf	
Stilling Well Diameter	3 ft (Dia "A") 0 ft (Dia "B") 0 ft (Dia "C")		3 ft (Dia "A") 0 ft (Dia "B") 0 ft (Dia "C")	
Stilling Well Aera	7.07 sf		7.07 sf	

Vert. Flow Velocity @ Qpk (Area)	(CFS) /	0.05 ft/sec	0.11 ft/sec
		Third Phase	Third Phase
<u>Clarifier Weir</u>			
Weir Diameter		24 ft ("A")	24 ft ("A")
		1 ft ("B")	1 ft ("B")
Weir Length		75.4 ft ("A")	75.4 ft ("A")
		1.0 ft ("B")	1.0 ft ("B")
Total Weir length		240.0	240.0
Maximum Weir loading at Qpk		20,000 GPD/sq.ft.	20,000 GPD/sq.ft.
Weir Loading at Qpk		1,041.6 GPD/sq.ft.	2,083.2 GPD/sq.ft.
<u>Chlorine Contact Chamber</u>			
Volume Required by TCEQ		464.2	928.4
Volume Furnished cf		1000.00 cf	1000.00 cf
Volume gal		7,480.0 gal	7,480.0 gal
Min TCEQ Detention Time		20 min	20 min
Detention Time @ Qpk			
(Vol. Gal)(1440) / (Qpk GPD)		43.1 min	21.5 min
Dosage Rate			
lb/day=Qpk MGD**mg/1*8.34		23.98 lb/day	47.96 lb/day
Solution Water Supply			
GPM=20 Gpm/100lb/day		4.80 GPM	9.59 GPM

Attachment T-7

29.76°N, 95.36°W (12 m asl).
Model: ERA5T.



Attachment T-8

SLUDGE PRODUCTION RATES

	Phase I			
	Avg. Daily Flow (MGD) = 0.063			
	Percent Capacity			
	<u>100%</u>	<u>75%</u>	<u>50%</u>	<u>25%</u>
<u>I. PARAMETERS</u>				
Average Daily Flows (MGD)	0.0625	0.046875	0.03125	0.015625
Dimensions & Volume of Digester	Volume = 3,201 cu.ft. = 23,943 gal			
CBOD ₅ Removal	Influent Concentration = 300 mg/l Effluent Concentration = 10 mg/l Net Removal = <u>290</u> mg/l			

II. DAILY SLUDGE PRODUCTION

Lbs. BOD ₅ /day Removal	151	113	76	38
Lbs. of Dry Sludge (using sludge age =30days at 20°C, 0.315 lbs. Sludge/lb.BOD ₅ removed)	48	36	24	12
Lbs of Wet Sludge Produced (assume 1.5% solids, lbs.dry/0.015)	3,174	2,381	1,587	794
Volume of Wet Sludge Produced (gal/day)'= lbs. wet /8.34 lbs/gal	381	285	190	95

III. REMOVAL SCHEDULE

Digester (gal) / Vol wet sludge produced = days between empties	63	84	126	252
--	----	----	-----	-----

Process Loadings

MLSS (mg/l) = 3000

Sludge will stay in the digester, clear liquor will be decanted off the digester and returned to the process to thicken the wasted solids.

Once the digester is full of thickened solids,the contents will be hauled by **the contracted sludge hauler** to one of the approved land application sites.

The sludge hauler will supply sludge hauling manifests showing volumes and concentration of sludge removed from the plant.

SLUDGE PRODUCTION RATES

	Phase II			
	Avg. Daily Flow (MGD) = 0.125			
	Percent Capacity			
	<u>100%</u>	<u>75%</u>	<u>50%</u>	<u>25%</u>
<u>I. PARAMETERS</u>				
Average Daily Flows (MGD)	0.125	0.09375	0.0625	0.03125
Dimensions & Volume of Digester				
	Volume =	6,402	cu.ft. =	47,887 gal
CBOD ₅ Removal				
	Influent Concentration = 300 mg/l			
	Effluent Concentration = 10 mg/l			
	Net Removal = <u>290</u> mg/l			

II. DAILY SLUDGE PRODUCTION

Lbs. BOD ₅ /day Removal	302	227	151	76
Lbs.of Dry Sludge (using sludge age =30days at 20°C, 0.315 lbs. Sludge/lb.BOD ₅ removed)	95	71	48	24
Lbs of Wet Sludge Produced (assume 1.5% solids, lbs.dry/0.015)	6,349	4,762	3,174	1,587
Volume of Wet Sludge Produced (gal/day)'= lbs. wet /8.34 lbs/gal	761	571	381	190

III. REMOVAL SCHEDULE

Digester (gal) / Vol wet sludge produced = days between empties	63	84	126	252
--	----	----	-----	-----

Process Loadings

MLSS (mg/l) = 3000

Sludge will stay in the digester, clear liquor will be decanted off the digester and returned to the process to thicken the wasted solids.

Once the digester is full of thickened solids,the contents will be hauled by **the contracted sludge hauler** to one of the approved land application sites.

The sludge hauler will supply sludge hauling manifests showing volumes and concentration of sludge removed from the plant.

